STATE OF MISSOURI Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

MEMORANDUM

DATE: OCT 2 5 2012

TO: John Madras, Director
Water Protection Program

FROM: Alan J. Reinkemeyer, Acting Director
Division of Environmental Quality

SUBJECT: Schedules of Compliance, Policy for Staff Drafting Operating Permits

Background

Schedules of compliance are a regulatory tool specifically authorized under the Federal Clean Water Act and Missouri Clean Water Law. As defined in the Clean Water Act:

> "Schedule of compliance means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard."

The Missouri Clean Water Law (RSMo 644.051.4) states:

> "The director, in order to effectuate the purposes of sections 644.006 to 644.141, shall deny a permit if the source will violate any such acts, regulations, limitations or standards or will appreciably affect the water quality standards or the water quality standards are being substantially exceeded, unless the permit is issued with such conditions as to make the source comply with such requirements within an acceptable time schedule."

The "Schedule of Compliance" provision under the previous Water Quality Standards regulation (10 CSR 20-7.031) served to limit compliance schedules to three years. As a matter of practice, permits have been drafted with a default schedule of two years to meet ammonia limits and most other water quality-based effluent limits, with one additional year if the applicant could show a need for the additional time. For schedules related to disinfection, permit writers were relying on provisions of the effluent regulation (10 CSR 20-7.015) which allowed a five-year compliance schedule and implementation no later than December 31, 2013. Under this regulatory approach

facilities that did not have the resources to meet these schedules, or who chose not to invest the resources needed to meet these schedules, found themselves in noncompliance. The Department would then exercise a conference, conciliation, and persuasion strategy to resolve the issue. For cases in which this strategy failed, facilities were typically issued Notices of Violation followed by the formal enforcement process. To resolve each enforcement case appropriate schedules to meet permit limits were commonly negotiated. The resolution of each case was fact dependent, and it involved specific considerations of each facility's compliance history, ability to pay, and scope of work.

The regulations are changing. At the March 9, 2012, meeting of the Clean Water Commission, a revision to 10 CSR 20-7.031 was adopted. This revision became effective on June 30, 2012, and reads as follows:

> "(I) Schedule of Compliance. Notwithstanding the provisions for complying with bacteria requirements under 10 CSR 20-7.015(9)(H), any new effluent limitations for discharges affected by subsection (2)(A) of this rule shall be implemented within a reasonable time schedule for achieving full compliance, as described in a permit or other legally enforceable mechanism."

However, this new rule cannot be implemented in permits until Environmental Protection Agency (EPA) formally approves the Water Quality Standards rule change.

10 CSR 20-6.010 *Construction and Operating Permits* provides the general regulatory frame work for the use of schedules in permits. It reads:

> "(7) Schedules of Compliance.
>
> (A) Permits may contain schedules of compliance requiring the permittee to take specific steps to achieve expeditious compliance with applicable standards and limitations and other requirements. Schedules of compliance shall require compliance as soon as practicable, but in no case later than an applicable statutory deadline.
>
> (B) If any permit allows a time for achieving final compliance from the date of permit issuance, the schedule of compliance in the permit shall set forth interim requirements and the dates for their achievement.
>
> (C) Within fourteen (14) days following each interim date and the final date of compliance, the permittee shall provide the department with written notice of the permittee's compliance or noncompliance with the interim or final requirement for the dates.
>
> (D) The department may modify a schedule of compliance in an issued permit upon request and a showing of justification by the applicant. In no case

> shall the compliance schedule be modified to extend beyond an applicable statutory treatment deadline."

Regarding Total Maximum Daily Loads (TMDLs), 10 CSR 20-7.015 *Effluent Regulations* states:

> "Where the use of effluent limitations set forward in this section is known or expected to produce an effluent that will endanger or violate water quality, the department will set specific effluent limitations for individual dischargers to protect the water quality of the receiving streams. When a waste load allocation or a total maximum daily load study is conducted for a stream or stream segment, all permits for discharges in the study area shall be modified to reflect the limits established in the study."

This regulation (10 CSR 20-7.015) is currently under revision, and one element proposed for revision pertains to the immediate implementation of TMDLs. If the rule is revised to allow appropriate schedules to implement TMDLs, this policy document will guide the application of schedules for these projects as well.

In May 2007, the U.S. EPA issued a memorandum titled "Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits" (attached) to provide a framework for review of permit compliance schedules consistent with the Clean Water Act and its implementing regulations. The Division is issuing this policy to apply the basic principles outlined in EPA's memo, and to provide specific guidance on how schedules are to be developed in Missouri's permits.

Application of Compliance Schedules

Missouri's policy is that compliance schedules can be included in permits so that applicants can have time to meet effluent limits based on any of Missouri's water quality standards consistent with remaining provisions of this policy. For new water quality standards, revised water quality standards that have become more stringent, and new interpretations of existing water quality standards permits shall be written to include schedules of compliance when the Water Protection Program (WPP) determines such schedules are necessary and appropriate.

Consistent with the requirements of the Clean Water Act and 40 CFR 125.3, compliance schedules are <u>not</u> allowed for effluent limits based on technology-based standards established in accordance with federal requirements. This includes secondary treatment requirements for publicly owned treatment works (POTWs), effluent limitations established consistent with Effluent Limitation Guidelines, and technology-based effluent limitations established on a case-by-case basis based on Best Professional Judgment (BPJ). In cases where an applicable federal compliance deadline has passed, the permit

may not provide relief by inclusion of a compliance schedule. In these cases the only way to provide an enforceable sequence of events leading to compliance with the effluent limitation is through a schedule of compliance included in a formal enforcement action.

Appropriateness, Duration, and Milestones of Permit Compliance Schedules

Each element of EPA's memo is presented in this section, followed by the specific interpretation and implementation to be applied as policy for Missouri.

1. EPA Memo: "When appropriate," NPDES permits may include "a schedule of compliance leading to compliance with CWA and regulations ... as soon as possible, but not later than the applicable statutory deadline under the CWA." 40 C.F.R. § 122.47(a)(1). Compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement. 40 C.F.R. § 122.47(a)(3).

   WPP Policy: Permit compliance schedules will be allowed only when the Water Protection Program determines that they are appropriate. Schedules are not appropriate for new discharges. For existing discharges, the compliance schedule must be established according to this memo (See Default Schedules and Factors that Modify).

   Compliance schedules may not be appropriate for facilities that have not made a good faith effort to comply with effluent limits and associated compliance schedules in previous permit cycles. Permit staff will coordinate with enforcement staff regarding schedules for facilities that are active enforcement cases. Compliance schedules are not appropriate solely to allow time for the development of a TMDL, a use attainability analysis, or site-specific water quality criteria.

2. EPA Memo: Any compliance schedule contained in an NPDES permit must be an "enforceable sequence of actions or operations leading to compliance with a [water quality-based] effluent limitation ["WQBEL"]" as required by the definition of "schedule of compliance" in section 502(17) of the CWA. *See also* 40 C.F.R. § 122.2 (definition of schedule of compliance).

   WPP Policy: With each schedule of compliance the permit writer must develop the schedule with enforceable milestones appropriate for the type of actions anticipated to be conducted, such that the final limits are met as soon as possible. Interim milestones shall be developed that are enforceable while providing flexibility for "real world" issues that may affect schedule. Template language exists for this purpose, and the permit writer may adapt language to the specific situation.

   During the period of time that the compliance schedule is in effect, interim limits shall apply. If possible, interim limits shall be established numerically. Where data to do this is

not available, permits may be written to require monitoring. Most commonly, interim limits are established based on the existing technological capability of the treatment facility under current or near-future loading conditions. The interim limits may also be based on the BPJ of the permit writer if it is believed that technological or operational factors could positively impact effluent quality during the period until final effluent limits are in effect. Interim limits reflect data and information drawn from discharge monitoring reports, inspections, compliance sampling by the department, and performance of similar facilities.

3. EPA Memo: Any compliance schedule contained in an NPDES permit must include an enforceable final effluent limitation and a date for its achievement that is within the time frame allowed by the applicable State or federal law provision authorizing compliance schedules as required by CWA sections 301(b)(1)(C); 502(17); the Administrator's decision in *Star-Kist Caribe, Inc.* 3 E.A.D. 172, 175, 177-178 (1990); and EPA regulations at 40 C.F.R. §§ 122.2, 122.44(d) and 122.44(d)(1)(vii)(A).

   WPP Policy: Permits will reflect the actual date by which the final effluent limit will apply. This date will be included in the permit even if the date is beyond the typical 5-year permit cycle.

4. EPA Memo: Any compliance schedule that extends past the expiration date of a permit must include the final effluent limitations in the permit in order to ensure enforceability of the compliance schedule as required by CWA section 502(17) and 40 C.F.R. § 122.2 (definition of schedule of compliance).

   WPP Policy: Compliance schedules may extend beyond the expiration date of a permit. The permit shall include these final limits and shall always reflect the actual date by which the final effluent limits will apply.

5. EPA Memo: In order to grant a compliance schedule in an NPDES permit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record, that the compliance schedule "will lead[ ] to compliance with an effluent limitation . . . " "to meet water quality standards" by the end of the compliance schedule as required by sections 301(b)(1)(C) and 502(17) of the CWA. *See also* 40 C.F.R. §§ 122.2, 122.44(d)(1)(vii)(A).

   WPP Policy: See item 7.

6. EPA Memo: In order to grant a compliance schedule in an NPDES permit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record and described in the Fact Sheet (40 C.F.R. § 124.8), that a compliance schedule is "appropriate" and that compliance with the final WQBEL is required "as soon as possible." *See* 40 C.F.R. §§ 122.47(a), 122.47(a)(1).

   WPP Policy: See item 7.

7. EPA Memo: In order to grant a compliance schedule in an NPDES permit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record, that the discharger cannot immediately comply with the WQBEL upon the effective date of the permit. 40 C.F.R. §§ 122.47, 122.47(a)(1).

   WPP Policy (Items 5., 6., & 7.): Permit writers shall document the decision to provide a compliance schedule in the Fact Sheet, and this shall serve as the administrative record of the decision. Language in the Fact Sheet will reflect that the discharger cannot immediately comply with water quality-based effluent limits, but that by the end of an appropriate compliance schedule water quality standards will be met as soon as possible.

8. EPA Memo: Factors relevant to whether a compliance schedule in a specific permit is "appropriate" under 40 C.F.R. § 122.47(a) include: how much time the discharger has already had to meet the WQBEL(s) under prior permits; the extent to which the discharger has made good faith efforts to comply with the WQBELs and other requirements in its prior permit(s); whether there is any need for modifications to treatment facilities, operations or measures to meet the WQBELs and if so, how long would it take to implement the modifications to treatment, operations or other measures; or whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit.

   WPP Policy: See item 11.

9. EPA Memo: Factors relevant to a conclusion that a particular compliance schedule requires compliance with the WQBEL "as soon as possible," as required by 40 C.F.R. § 122.47(a)(1) include: consideration of the steps needed to modify or install treatment facilities, operations or other measures and the time those steps would take. The permitting authority should not simply presume that a compliance schedule be based on the maximum time period allowed by a State's authorizing provision.

   WPP Policy: See item 11.

10. EPA Memo: A compliance schedule based solely on time needed to develop a Total Maximum Daily Load is not appropriate, consistent with EPA's letter of October 23, 2006, to Celeste Cantu, Executive Director of the California State Water Resources Control Board, in which EPA disapproved a provision of the Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries for California.

    WPP Policy: See item 11.

11. EPA Memo: A compliance schedule based solely on time needed to develop a Use Attainability Analysis is also not appropriate, consistent with EPA's letter of February 20, 2007, to Doyle Childers, Director Missouri Department of Natural Resources, nor is a compliance schedule based solely on time needed to develop a site specific criterion, for the same reasons as set forth in the October 23, 2006, (referenced in Paragraph 10) and February 20, 2007 letters.

    WPP Policy (Items 8., 9., 10., & 11.): Please refer to the Default Schedules and Factors that Modify sections for the outline as to how schedules are to be developed and what relevant factors must be considered and documented in the Fact Sheet. The intention of these sections is to provide schedules that are consistent and consider a variety of factors that affect implementation of protective effluent limits.

Default Schedules

First, the permit writer must evaluate the appropriateness of a schedule on the basis of necessity. The necessity determination will be made on the basis of whether the pertinent effluent limits can be met. This determination will normally involve a review of the effluent limits, Discharge Monitoring Report data, enforcement records if applicable, and perhaps other information contained in the permit record. There is no prohibition against providing a compliance schedule for an effluent limit that is the same as the limit in the previous permit, or even for a less stringent limit, provided anti-backsliding provisions have been met. However, permit writers are expected to consider the amount of time already given to meet effluent limits under previous permits and enforcement actions. These specific circumstances, like those below, can be factored into the permit writer's development of the appropriate compliance schedule. This may require close coordination with enforcement staff.

The following points detail the default schedules for various situations; additional time may be allowed upon consideration of various factors (see Considerations to Modify Default Schedules). Based on the details below, Missouri has determined that these default schedules are "as soon as practical" unless other case specific details indicate otherwise.

- POTWs

As a default, permit writers shall provide a four-year schedule of compliance for large capital projects at POTWs. This will allow time for the community to plan the project, get voter approval for a bond issue, acquire property or appropriate easements, put contracts in place for professional services, arrange geohydrological assessments, obtain sufficient financing, prepare engineering designs, undergo permit review, construct the facility, and conduct the necessary shakedown. For purposes of developing compliance schedules, disinfection would not be considered a large capital project (see Disinfection section below) unless a bond measure would be needed.

- Private Domestic Wastewater Treatment Plants (WWTPs)

As a default, permit writers shall provide a 3-year schedule of compliance for large capital projects at private domestic WWTPs. Less time is needed for private facilities because raising funds is more direct and straightforward, and these projects typically require less time for processing (e.g., procuring professional services).

- Industrial Projects

A 2-year default schedule is also appropriate for industrial facilities because less time is needed to plan for funding.

- Disinfection

The Clean Water Commission established an extended schedule for disinfection in 10 CSR 20-7.015 Effluent Regulations. Facilities have had adequate time to plan for and construct disinfection processes.

Many waters, however, are being considered for a classification change. If a facility is discharging to a stream that is reclassified and disinfection becomes a new requirement a default schedule of compliance shall be two years unless a bond measure is needed to fund this project.

Considerations to Modify Default Schedules

There are numerous project-specific factors that may indicate a need to modify a schedule of compliance. Historically, these factors were discussed directly with the permittee, often at some length during enforcement negotiations in an effort to establish achievable schedules. Iterative discussions of schedules between the permit writer and the permittee are not possible given staff resources and the number of projects.

Below is a discussion of a number of factors that permit writers can weigh as they are considering modifying the default schedules of compliance. Each facility's situation is unique, and the underlying principal is to require upgrades "as soon as practical." As these factors are considered it becomes evident that the permit writer will be asked to apply their best judgment. To provide additional comfort in making these decisions, a consultation with peers may prove useful.

Affordability: A procedure has been developed for the Department to make an affordability determination for facilities that are publicly owned. The procedure is quite detailed and considers not only cost and utility rate issues but also community demographics and the local economy. For some projects, affordability considerations may indicate that delaying an upgrade may be necessary so that funds can be raised or so that funding reserves can be built.

Compliance schedules shall reflect the information in the affordability finding. For projects that have affordability findings showing that the project will have a "low financial impact," the finding will not be used to modify the default schedule. For those projects expected to have "medium financial impact," the default schedule can be extended up to the term of the permit (five years total).

For cases where the permit writer determines that the project will have a "high financial impact" schedules of compliance can be extended beyond the term of the permit. Permit schedules will not be extended beyond two permit terms (typically about ten years) unless the Department enters into an enforceable agreement with the applicant. Please refer to the Use Attainability Analysis section for a discussion of other paths for projects that are expected to have "high financial impacts." This consideration will be reviewed when the department implements widespread, expensive new requirements, such as nutrient reductions.

The Department is not required to make a formal affordability determination for private and industrial sources. For these situations, a permit writer can rely on a similar, albeit less rigorous, cost analysis to justify a modification to the two-year default schedule. During the typical 15-day review, private and industrial sources may provide the information needed to inform this schedule determination.

Land Acquisition: One of the significant tasks facing communities that must expand or replace their treatment plant is land acquisition. Real estate negotiations, legal agreements, and easement work can affect construction schedules. Permit writers may consider these factors and extend compliance schedules to accommodate these considerations based on information provided by the permittee so long as the schedule does not extend beyond one permit term (five years).

Age of the Infrastructure: Permit writers should consider the life of the existing treatment facility. Older plants that have limited remaining lifespan may need to be replaced before the plant fails. These situations are likely to be brought to light by regional inspectors or other Department staff during site visits or inspections. For these cases, it is appropriate for the permit writer to establish a shorter compliance schedule so that the project to replace the plant occurs at the appropriate time. For facilities that are newer, and have considerable life, the financial burden for the community may be considerable because they may still be paying for the existing facility. In these cases, permit writers may modify the schedule to allow for additional time. This additional time would be allowed primarily for funding reasons. Upon reviewing the specifics of the situation, which for many projects will be partially contained in the affordability analysis, permit writers may provide schedules of compliance that extend beyond the term of the permit. However, permit schedules will not be extended beyond a total of ten years total unless the Department enters into an enforceable agreement with the applicant. Please refer to the Use Attainability Analysis section for a discussion of other paths for projects that are expected to have "high financial impacts."

This discussion regarding schedule modification because of age of the infrastructure is based on the assumption that the project involves a complete replacement. For projects that involve retrofitting or add on treatment projects, the schedule of compliance may be affected less by the age of the existing infrastructure.

In addition to the age of the treatment plant, some communities have neglected maintenance of their collection system. Permit writers may allow reasonable modifications to schedules of compliance so that communities can have some time to address collection system issues prior to replacement of treatment systems provided the requirement to address collection system improvements are already in place. Schedules may be extended for three additional years for this purpose.

Continuing Authority Issues: Default schedules of compliance can be modified upon consideration of ownership issues. Missouri has experienced many situations in which treatment providers have gone bankrupt and/or the facility is placed into receivership. It is appropriate for permit writers to consider the facts of the particular situation and provide additional time for the new continuing authority to rectify previous environmental and financial management issues. Schedules of compliance can be extended to the term of a permit cycle (five years) based on these considerations.

Environmental Threat / Discharges Where There Is a Known Stream Impact: It is prudent for permit writers to consider the discharge setting as they consider modifying compliance schedules. Impaired streams and sensitive environments may warrant quicker schedules or at least allow for less flexibility of schedule.

TMDLs: If 10 CSR 20-7.015 *Effluent Regulations* is revised to allow appropriate schedules to implement TMDLs, this guidance will serve permit writers as they determine compliance schedules. Most TMDLs will have accompanying implementation plans, and the permit should be written to conform to those plans. For situations in which the TMDL does not have an implementation plan, the considerations outlined in this memo will serve to guide the permit writer to develop appropriate schedules of compliance.

Integrated Planning: EPA has established a protocol for municipalities that allows them, with state and EPA concurrence, the ability to stage clean water improvements to their systems in priority order over long time frames. See June 5, 2012, memo titled "Integrated Municipal Stormwater and Wastewater Planning Approach Framework" (attached). Cities using this process will establish schedules for improvements, and schedules in permits and enforcement actions will use these schedules when addressing the planned improvements.

Use Attainability Analysis

For situations in which the permit writer determines that a project has a "high financial impact," applicants may wish to proceed down other pathways. Federal regulations allow states flexibility to modify water quality standards through the Use Attainability Analysis (UAA) process. The regulations set forth the factors that may be used to modify designated uses, one of which (factor six) is based on a demonstration that the controls "would result in substantial and widespread economic and social impact." At this time, EPA guidance on this approach is very limited and when available is overly narrow and controversial. Large, complex UAAs have cost some communities hundreds of thousands of dollars to develop the information needed for EPA to approve. Some states have developed specific guidance on how to develop factor six UAAs, and that has helped streamline the process and reduce the resources needed to complete the studies that may support removal of a use. The Department intends to investigate how other states have approached this issue.

References

EPA, 2007, Memorandum from Jim Hanlon, Director, Office of Wastewater Management to Alexis Strauss, Director, Water Division EPA Region IX regarding Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits, May 10, 2007. http://www.epa.gov/npdes/pubs/memo_complianceschedules_may07.pdf

EPA, 2012, Memorandum from Nancy Stoner, Acting Assistant Administrator, Office of Water and Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance regarding Integrated Municipal Stormwater and Wastewater Planning Approach Framework, June 5, 2012.
http://www.epa.gov/npdes/pubs/integrated_planning_framework.pdf

AJR:jrj

Attachments

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 5 2012

MEMORANDUM

SUBJECT: Integrated Municipal Stormwater and Wastewater Planning Approach Framework

FROM: Nancy Stoner
Acting Assistant Administrator
Office of Water

Cynthia Giles
Assistant Administrator
Office of Enforcement and Compliance Assurance

TO: EPA Regional Administrators
Regional Permit and Enforcement Division Directors

In recent years, EPA has increasingly embraced integrated planning approaches to municipal wastewater and stormwater management. EPA further committed to work with states and communities to implement and utilize these approaches in its October 27, 2011 memorandum *"Achieving Water Quality Through Municipal Stormwater and Wastewater Plans."* Integrated planning will assist municipalities on their critical paths to achieving the human health and water quality objectives of the Clean Water Act by identifying efficiencies in implementing requirements that arise from distinct wastewater and stormwater programs, including how to best prioritize capital investments. Integrated planning can also facilitate the use of sustainable and comprehensive solutions, including green infrastructure, that protect human health, improve water quality, manage stormwater as a resource, and support other economic benefits and quality of life attributes that enhance the vitality of communities.

To provide further guidance on developing and implementing effective integrated plans under this approach, we have developed, with extensive public input, the attached Integrated Municipal Stormwater and Wastewater Planning Approach Framework document. We are posting the framework document on our website and, as they become available, will provide practical examples of how municipalities are implementing this approach. We would like to thank Regions 2, 4, 5, 7 and 10 for their assistance in conducting public workshops to gain input on the draft framework. We encourage all Regions to work with their States to identify

appropriate opportunities for implementing the Integrated Planning approach. We will continue to work with the Regions as we explore the pathway forward on implementing this approach.

We encourage you to contact Deborah Nagle, Director, Water Permits Division (nagle.deborah@epa.gov) and Mark Pollins, Director, Water Enforcement Division (pollins.mark@epa.gov) with any questions you might have.

Attachment

cc: Regional Permit and Enforcement Liaisons
Association of Clean Water Administrators
United States Conference of Mayors
National League of Cities
American Rivers
National Association of Clean Water Agencies
National Association of Flood & Stormwater Management Agencies
Natural Resources Defense Council
Water Environment Federation
Environmental Council of States

INTEGRATED MUNICIPAL STORMWATER AND WASTEWATER PLANNING APPROACH FRAMEWORK

May, 2012

The purpose of this framework is to provide further guidance for EPA, States and local governments in developing and implementing effective integrated plans under the Clean Water Act (CWA). The framework identifies the operating principles and essential elements of an integrated plan. The integrated planning approach is voluntary. The responsibility to develop an integrated plan rests with the municipality that chooses to pursue this approach. If a municipality decides to take advantage of this approach, the integrated plan that it develops can provide information to inform the permit and enforcement processes and can support the development of conditions and requirements in permits and enforcement orders. The integrated plan should identify the municipality's relative priorities for projects and include a description of how the proposed priorities reflect the relative importance of adverse impacts on human health and water quality and the municipality's financial capability. The integrated plan will be the starting point for development of appropriate implementation actions, which may include requirements and schedules in enforceable documents.

EPA will continue to provide opportunities for stakeholder input during the implementation of this framework. Outreach activities associated with this effort will include the development of case studies and best practices.

EPA recognizes that approved National Pollutant Discharge Elimination System (NPDES) States are partners in the implementation of the program and have the lead for the day-to-day activities in their States. Many States have existing water quality management planning processes, which may include those established under Section 208 and 303 of the CWA, that may help facilitate the development of an integrated plan and work in conjunction with the implementation of an integrated plan. Integrated plans should be consistent with, and designed to meet the objectives of, existing total maximum daily loads (TMDLs). EPA is committed to working closely with the States in the implementation of this framework. EPA Regions and Headquarters will work with States when appropriate to determine the proper response to an integrated plan.

I. Background

In recent years, EPA has begun to embrace integrated planning approaches to municipal wastewater and stormwater management. EPA further committed to work with States and communities to implement and utilize integrated planning approaches to municipal wastewater and stormwater management in its October 27, 2011 memorandum *"Achieving Water Quality Through Municipal Stormwater and Wastewater Plans."*[1] Integrated planning will assist municipalities on their critical paths to achieving the human health and water quality objectives of the CWA by identifying efficiencies in implementing requirements that arise from distinct wastewater and stormwater programs, including how best to make capital investments.

[1] The October 27, 2011 memorandum is available at http://cfpub.epa.gov/npdes/integratedplans.cfm.

Integrated planning can also facilitate the use of sustainable and comprehensive solutions, including green infrastructure, that protect human health, improve water quality, manage stormwater as a resource, and support other economic benefits and quality of life attributes that enhance the vitality of communities. In February, 2012, EPA released "Planning for Sustainability: A Handbook for Water and Wastewater Utilities."[2] The Handbook describes a number of steps utilities can take to build sustainability considerations into their existing planning processes and make the best infrastructure choices that protect water quality and ensure the long-term sustainability of infrastructure assets. The elements of an integrated plan which are described below are complementary to the elements in the Sustainability Handbook.

The integrated planning approach does not remove obligations to comply with the CWA, nor does it lower existing regulatory or permitting standards, but rather recognizes the flexibilities in the CWA for the appropriate sequencing and scheduling of work.

II. Principles

Following are overarching principles that EPA will use in working with municipalities to implement an integrated approach to meet their wastewater and stormwater program obligations under the CWA. Also presented are guiding principles that EPA recommends municipalities use in the development of their integrated plans.

Overarching Principles

1. This effort will maintain existing regulatory standards that protect public health and water quality.

2. This effort will allow a municipality to balance CWA requirements in a manner that addresses the most pressing public health and environmental protection issues first.

3. The responsibility to develop an integrated plan rests with the municipality that chooses to pursue this approach. Where a municipality has developed an initial plan, EPA and/or the State will determine appropriate actions, which may include developing requirements and schedules in enforceable documents.

4. Innovative technologies, including green infrastructure, are important tools that can generate many benefits, and may be fundamental aspects of municipalities' plans for integrated solutions.

[2] The February 2012 Handbook is available at http://water.epa.gov/infrastructure/sustain/upload/EPA-s-Planning-for-Sustainability-Handbook.pdf.

Principles to Guide the Development of an Integrated Plan

Integrated plans should:

1. Reflect State requirements and planning efforts and incorporate State input on priority setting and other key implementation issues.

2. Provide for meeting water quality standards and other CWA obligations by utilizing existing flexibilities in the CWA and its implementing regulations, policies and guidance.

3. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance.

4. Evaluate and incorporate, where appropriate, effective sustainable technologies, approaches and practices, particularly including green infrastructure measures, in integrated plans where they provide more sustainable solutions for municipal wet weather control.

5. Evaluate and address community impacts and consider disproportionate burdens resulting from current approaches as well as proposed options.

6. Ensure that existing requirements to comply with technology-based and core requirements are not delayed.

7. Ensure that a financial strategy is in place, including appropriate fee structures.

8. Provide appropriate opportunity for meaningful stakeholder input throughout the development of the plan.

III. Elements of an Integrated Plan

Defining Scope

NPDES requirements for separate sanitary sewer systems, combined sewer systems, municipal separate storm sewer systems and at wastewater treatment plants may be included in an integrated plan. Each of the aforementioned systems may have different owners/operators responsible for the various sewer systems and treatment plants as well as different geographic service areas and different service populations. In addition, integrated plans may address source water protection efforts that protect surface water supplies, and/or nonpoint source control through proposed trading approaches or other mechanisms. When developing an integrated plan, a municipality/community must determine and define the scope of the integration effort, ensure the participation of entities that are needed to implement the integrated plan, and identify the role each entity will have in implementing the plan. EPA will continue to work closely with State and local governments to incorporate green infrastructure approaches to water quality within permits and enforcement actions, consistent with the practice over the past several years.

Plan Elements

An integrated program should be tailored to the size and complexity of the wastewater and stormwater infrastructure addressed in the plan. Although the details of each integrated plan will vary depending on the unique challenges of each community, an integrated plan generally should address the following elements:

Element 1: A description of the water quality, human health and regulatory issues to be addressed in the plan, including:

- An assessment of existing challenges in meeting CWA requirements and projected future CWA requirements (*e.g.*, water quality-based requirements based on a new TMDL);
- Identification and characterization of human health threats;
- Identification and characterization of water quality impairment and threats and, where available, applicable wasteload allocations (WLAs) of an approved TMDL or an equivalent analysis;
- Identification of sensitive areas and environmental justice concerns; and
- Metrics for evaluating and meeting human health and water quality objectives.

Element 2: A description of existing wastewater and stormwater systems under consideration and summary information describing the systems' current performance, including:

- Identification of municipalities and utilities that are participating in the planning effort and a characterization of their wastewater and stormwater systems; and
- Characterization of flows in and from the wastewater and stormwater systems under consideration.

Element 3: A process which opens and maintains channels of communication with relevant community stakeholders in order to give full consideration of the views of others in the planning process and during implementation of the plan.

- Municipalities developing integrated wastewater and stormwater plans should provide appropriate opportunities that allow for meaningful input during the identification, evaluation, and selection of alternatives and other appropriate aspects of plan development;
- Municipalities participating in an integrated wastewater and stormwater plan should, during the implementation of the plan, make pertinent new information available to the public and provide opportunities for meaningful input into the development of proposed modifications to the plan; and
- Where a permit or enforcement order incorporates green infrastructure requirements, the municipalities required to implement the requirements should allow for public involvement to assist in evaluating the effectiveness of the approach and to assist in successful implementation of the approach.

Element 4: A process for identifying, evaluating, and selecting alternatives and proposing implementation schedules which addresses:

- The use of sustainable infrastructure planning approaches, such as asset management, to assist in providing information necessary for prioritizing investments in and renewal of major wastewater and stormwater systems;
- The use of a systematic approach to consider and incorporate, where appropriate, green infrastructure and other innovative measures where they provide more sustainable solutions;
- Identification of criteria, including those related to sustainability, to be used for comparing alternative projects and a description of the process used to compare alternatives and select priorities;
- Identification of alternatives, including cost estimates, potential disproportionate burdens on portions of the community, projected pollutant reductions, benefits to receiving waters and other environmental and public health benefits associated with each alternative;
- An analysis of alternatives that documents the criteria used, the projects selected, and why they were selected;
- A description of the relative priorities of the projects selected including a description of how the proposed priorities reflect the relative importance of adverse impacts on public health and water quality[3] and the permittee's financial capability;
- Proposed implementation schedules; and
- For each entity participating in the plan, a financial strategy and capability assessment that ensures investments are sufficiently funded, operated, maintained and replaced over time. The assessment of the community's financial capability should take into consideration current sewer rates, stormwater fees and other revenue, planned rate or fee increases, and the costs, schedules, anticipated financial impacts to the community of other planned stormwater or wastewater expenditures and other relevant factors impacting the utility's rate base. Municipalities can use as a guide the document "CSO Guidance for Financial Capability Assessment and Schedule Development," EPA 832-B-97-004) or other relevant EPA or State tools.

Element 5: Measuring success - As the projects identified in the plan are being implemented, a process for evaluating the performance of projects identified in a plan, which may include evaluation of monitoring data, information developed by pilot studies and other studies and other relevant information, including:

- Proposed performance criteria and measures of success;
- Monitoring program to address the effectiveness of controls, compliance monitoring and ambient monitoring; and
- Evaluation of the performance of green infrastructure and other innovative measures to inform adaptive design and management to include identification of barriers to full implementation.

[3] An example of an informal tool to help identify priorities is given by "Combined Sewer Overflow Guidance for Screening and Ranking", EPA, August 1995. The guidance is available at http://www.epa.gov/npdes/pubs/owm595.pdf.

Element 6: Improvements to the Plan

- A process for identifying, evaluating and selecting proposed new projects or modifications to ongoing or planned projects and implementation schedules based on changing circumstances; and
- In situations where a municipality is seeking modification to a plan, or to the permit or enforcement order that is requiring implementation of the plan, the municipality should collect the appropriate information to support the modification and should be consistent with Elements 1 – 5 discussed above.

IV. Implementation

Implementing an integrated approach to wastewater and stormwater management may require coordination between State and federal NPDES permit and enforcement authorities. EPA recognizes the importance of and encourages early coordination between NPDES States and EPA on key implementation issues that may arise in individual integrated plans. This will ensure that plans will not need to be revised in order for them to be implemented. State NPDES permit authorities should initiate discussions with EPA on their efforts to address integrated plans that raise issues associated with ongoing federal enforcement actions and when addressing the initial integrated plans developed in the State or when a permit may potentially present a novel approach. EPA and States will determine the appropriate roles of permit and enforcement authorities in addressing the regulatory requirements identified in the plan. As discussed below, elements of an integrated plan can be incorporated, where appropriate, into NPDES permits, enforcement actions, or both. Permit issuance and implementation of existing permit and enforcement requirements and activities shall not be delayed while an integrated plan is being developed.

Permits

All or part of an integrated plan can be incorporated into an NPDES permit as appropriate. Limitations and considerations for incorporating integrated plans into permits include:

- Compliance schedules for meeting water quality-based effluent limitations (WQBELs) in NPDES permits issued for discharges from publicly owned treatment works (POTWs) and/or combined sewer overflows need to be consistent with the requirements in 40 CFR section 122.47. Where appropriate, an NPDES permit authority may include a compliance schedule in a permit for WQBELs based on post July 1, 1977 State water quality standards provided the compliance schedule is "as soon as possible" and the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them. Compliance schedules in permits should prioritize the most significant human health and environmental needs first.

- Reopener provisions in permits consistent with section 122.62(a) may better facilitate adaptive management approaches.

- Green infrastructure approaches and related innovative practices that provide more sustainable solutions by managing stormwater as a resource should be considered and incorporated, where appropriate, where they provide more sustainable solutions for municipal wet weather control.

- Appropriate water quality trading may be reflected in NPDES permits (*see* EPA's 2003 Water Quality Trading Policy).

Enforcement

EPA and the States may bring enforcement actions against municipalities to address noncompliance with the CWA. Enforcement tools include administrative orders, negotiated consent decrees, or other state formal enforcement actions that require compliance with various requirements under the CWA. All or part of an integrated plan may be able to be incorporated into the remedy of a federal or State enforcement action. Considerations for incorporating integrated plans into enforcement actions include:

- The integrated planning framework should ensure that all necessary parties to a consent decree or administrative order are involved (*e.g.* municipality, utility authority).

- When there is a history of long-standing violations without significant progress, enforcement is used to address past violations and establish a path for coming into compliance.

- Where an extended time frame is necessary to achieve compliance, enforcement orders should provide schedules for CWA requirements that prioritize the most significant human health and environmental needs first.

- How permitting and enforcement actions may be used in conjunction to ensure implementation of the integrated plans.

- Sufficient flexibility should be provided in enforcement orders to allow for adaptive management approaches.

- Green infrastructure approaches and related innovative practices that provide more sustainable solutions by managing stormwater as a resource should be considered and incorporated, where appropriate, where they provide more sustainable solutions for municipal wet weather control.

- Environmentally beneficial projects that are identified in an integrated plan and which the municipality is not otherwise legally required to perform, such as water conservation measures, may be included in a settlement agreement consistent with EPA's Supplemental Environmental Projects Policy[4].

[4] The May 1, 1998, policy is available at http://www.epa.gov/oecaerth/resources/policies/civil/seps/fnlsup-hermn-mem.pdf.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 10 2007

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits

FROM: James A. Hanlon, Director
Office of Wastewater Management

TO: Alexis Strauss, Director
Water Division
EPA Region 9

Recently, in discussions with Region 9, questions have been raised concerning the use of compliance schedules in National Pollutant Discharge Elimination System (NPDES) pennits consistent with the Clean Water Act (CWA) and its implementing regulations at 40 C.F.R. § 122.47. The use of compliance schedules in NPDES permits is also the subject of ongoing litigation in California. The purpose of this memo is to provide a framework for the review of permits consistent with the CWA and its implementing regulations.

When maya permitting authority include a compliance schedule in a permit for the purpose of achieving a water quality-based effluent limitation?

In *In The Matter of Star-Kist Caribe, Inc.,* 3 E.A.D. 172, 175, 177 (1990), the EPA Administrator interpreted section 301(b)(l)(C) of the CWA to mean that 1) after July 1, 1977, pennits must require immediate compliance with *(i.e.,* may not contain compliance schedules for) effluent limitations based on water quality standards adopted before July 1, 1977, and 2) compliance schedules are allowed for effluent limitations based on standards adopted after that date only if the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them.

What principles are applicable to assessing whether a compliance schedule for achieving a water quality-based effluent limitation is consistent with the CWA and its implementing regulations?

1. "When appropriate," NPDES permits may include "a schedule of compliance leading to compliance with CWA and regulations ... as soon as possible, but not later than the applicable statutory deadline under the CWA." 40 C.F.R. § 122.47(a)(1). Compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement. 40 c.F.R. § 122.47(a)(3).

2. Any compliance schedule contained in an NPDES permit must be an "enforceable sequence of actions or operations leading to compliance with a [water quality-based] effluent limitation ["WQBEL"]" as required by the definition of "schedule of compliance" in section 502(17) of the CWA. *See also* 40 c.F.R. § 122.2 (definition of schedule of compliance).

3. Any compliance schedule contained in an NPDES pennit must include an enforceable final effluent limitation and a date for its achievement that is within the timeframe allowed by the applicable state or federal law provision authorizing compliance schedules as required by CWA sections 301(b)(1)(C); 502(17); the Administrator's decision in *Star-Kist Caribe, Inc.* 3 E.A.D. 172, 175, 177-178 (1990); and EPA regulations at 40 C.F.R. §§ 122.2, 122.44(d) and 122.44(d)(I)(vii)(A).

4. Any compliance schedule that extends past the expiration date of a pennit must include the final effluent limitations in the pennit in order to ensure enforceability of the compliance schedule as required by CWA section 502(17) and 40 C.F.R. § 122.2 (definition of schedule of compliance).

5. In order to grant a compliance schedule in an NPDES pennit, the pennitting authority has to make a reasonable finding, adequately supported by the administrative record, that the compliance schedule "willlead[] to compliance with an effluent limitation ... " "to meet water quality standards" by the end of the compliance schedule as required by sections 301(b)(I)(C) and 502(17) of the CWA. *See also 40* C.F.R. §§ 122.2, 122.44(d)(1)(vii)(A).

6. In order to grant a compliance schedule in an NPDES pennit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record and described in the fact sheet (40 C.F.R. § 124.8), that a compliance schedule is "appropriate" and that compliance with the final WQBEL is required "as soon as possible." *See* 40 C.F.R. §§ 122.47(a), 122.47(a)(I).

7. In order to grant a compliance schedule in an NPDES pennit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record, that the discharger cannot immediately comply with the WQBEL upon the effective date of the pennit. 40 C.F.R. §§ 122.47, 122.47(a)(1).

8. Factors relevant to whether a compliance schedule in a specific permit is "appropriate" under 40 C.F.R. § 122.47(a) include: how much time the discharger has already had to meet the WQBEL(s) under prior pennits; the extent to which the discharger has made good faith efforts to comply with the WQBELs and other requirements in its prior pennit(s); whether there is any need for modifications to treatment facilities, operations or measures to meet the WQBELs and if so, how long would it take to implement the modifications to treatment, operations or other measures; or whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit.

9. Factors relevant to a conclusion that a particular compliance schedule requires compliance with the WQBEL "as soon as possible," as required by 40 C.F.R. § I22.47(a)(I) include: consideration of the steps needed to modify or install treatment facilities, operations or other measures and the time those steps would take. The pennitting authority should not simply presume that a compliance schedule be based on the maximum time period allowed by a State's authorizing provision.

10. A compliance schedule based solely on time needed to develop a Total Maximum Daily Load is not appropriate, consistent with EPA's letter of October 23, 2006, to Celeste Cantu, Executive Director of the California State Water Resources Control Board, in which EPA disapproved a provision of the Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries for California.

11. A compliance schedule based solely on time needed to develop a Use Attainability Analysis is also not appropriate, consistent with EPA's letter of February 20, 2007, to Doyle Childers, Director Missouri Department of Natural Resources, nor is a compliance schedule based solely on time needed to develop a site specific criterion, for the same reasons as set forth in the October 23, 2006, (referenced in Paragraph 10) and February 20, 2007 letters.

If you have any questions, please contact me at (202) 564-0748 or have your staff contact Linda Boornazian at (202) 564-0221.