



## Subchapter 8: "The Septic Rule"

### *New Jersey's Newly Adopted Water Quality Management Planning Rule NJAC 7:15-8*

On March 20, 2001, the New Jersey Department of Environmental Protection (DEP) recently adopted changes to NJAC 7:15, the Water Quality Management Planning regulations which govern how municipalities and developers analyze and plan for projects which may have impacts on watershed resources.

DEP took this action because land use changes are impacting water resources in the state. They point out that population growth leads to land use change -- NJ: 1960 4.8 million; 1970 7.2 million; 1990 7.7 million people. Moreover, urban sprawl has far exceeded the rate of population increase. Land use changes result in: changes to stream flow (base flow, flooding); water quality and habitat degradation; reduction in biological diversity and a shift to more disturbance-tolerant species; competing demands for water. Environmental analyses are needed to protect water quality, water quantity, and ecosystem health. These analyses include evaluations of pollutant loading, water use, riparian corridors, and threatened and endangered species.

In the past, areas that were not designated to be in a sewer service area were locally approved for septic systems for 49 housing units or less. The new Subchapter 8 of NJAC 7:15 requires developments of 6 or more residential units or projects that generate 2,000 gallons per day or more of wastewater to perform environmental assessments to address water resource impacts to the watershed.

Any planned discharge to groundwater of 2000 gallons per day (gpd) or more, by a single or multiple discharge point (i.e. large septic system(s) or 6 or more individual wastewater systems), must undergo a "consistency determination" (CD) by DEP's Division of Watershed Management (DWM). "Consistency" means the project is already included in and accounted for in the Water Quality Management Plan (WQMP) for the region. Golf courses, and any large project for which flow calculations are unclear, should always be referred to DWM for a consistency determination (most golf courses will be found inconsistent and will require an amendment)

As part of this amendment process, the developer is required to complete several environmental analyses:

- **Pollutant Loading Analysis for nonpoint source pollution (NPS)** (i.e. runoff) to surface water is triggered by a proposed land use that may cause NPS to a waterway. DEP's objective is no net increase in pollution load and to minimize changes in the hydrologic response (such as downstream flooding). To avoid hydrologic response and polluting runoff, the developer can use various best management practices including techniques that: minimize impervious cover; maintain natural drainage patterns; avoid concentrating flow/shortening time of concentration; maintain natural vegetation and riparian buffers; design for sheet flow of stormwater through riparian buffers; infiltrate stormwater, recharge.

- **Pollutant Loading Analysis to groundwater** is triggered by a new discharge to groundwater from 6 or more residential units on septic systems or discharge(s) to groundwater of greater than 2000 gpd. DEP's objective is non-degradation. The nitrate dilution model (on the DEP web site) is to be applied. A NJ Pollution Discharge Elimination System permit (NJPDES) is needed and may require soil suitability and water table analyses in the planning stage.
- **The riparian corridor** is the land adjacent to a stream, including first order streams and related drainage features and headwaters. The trigger for a review of the riparian corridor is encroachment of a project within the applicable buffer, determined by site plan evaluation, based on surface water qualification: 150 ft. for Freshwater1 (FW1) and Freshwater2-Trout Production, C1 (FW2), which are the highest quality waters and 75 ft. for other Freshwater 2 (FW2), the next highest. DEP's goal is no loss of buffer value with respect to water quality. DEP's Best Management Practices Manual, which can be found on their web site, is employed.
- **Water Use Issues** that must be studied include consumptive water use, inter and intra-basin transfer, increase in demand in water supply deficit area as per the Water Supply Master Plan, increase in demand on confined aquifers in Critical Areas 1 and 2, and other area restrictions such as Pinelands. Consumptive water use review is triggered when water supply is needed from a new or expanded supply, i.e. new water allocation permit (WAP). All water allocation regulations (NJAC 7:19-2.2(f) 1-4) must be met, including the requirement that the project's water use has no adverse impact to the resource or existing uses (for instance, a new WAP user cannot harm water source of existing residents'). WAP staff works with DWM staff on the permitting and review. DEP's goal is to minimize consumptive water use.
- **Other environmental analyses may be required** such as *threatened and endangered species, alternative land use analyses (i.e. cluster design), and environmental build-out analysis.*

### Timeline

Planning comes first. NO DEP PERMITS -- STREAM ENCROACHMENT, WETLANDS, WAP, NPDES, TWA, ETC. -- are granted until the Water Quality Management Plan amendment is approved by DWM. DWM may allow the applicant to begin the review process for other DEP permits it needs but the Bureaus/Divisions will work together on the WQMP first and those reviews will screen/inform the other permits.

The reason the WQMP amendment must be approved first is because the review may impact the applicant's design of the project and it is not appropriate to construct before evaluation and planning is complete. This further advocates for the applicant to have an early dialogue with DWM.

In terms of local review, all projects must be considered at the septic flow they will produce at build-out, even if they are constructed in phases over time. It is up to the municipality to make sure that projects do not attempt to avoid a CD determination by keeping different phases below the 2000 gpd threshold. Additionally, no sewage or septic system approvals can be granted locally until the NJPDES permit for the project has been approved by DEP, which will follow the WQMP amendment approval by DWM.

### HOW DOES THE WQMP REVIEW PROCESS WORK?

First, a consistency determination (CD) is done and, if needed, a WQMP Plan Amendment or Revision is done. All projects which need a DEP permit must have a consistency determination (as per NJAC 7:15). The project is reviewed considering the Areawide WQMP, which is included in the State WQMP, on file in Trenton. There's informal review, formal review, and screening.

A CD consists of a review of the proposed project in comparison to the WQM Plan. The maximum time it takes is 90 days. There is a checklist that applicants complete to screen for WQMP issues; informal reviews are done for projects that do not have a complete permit application before DEP; formal CD reviews are conducted by DWM upon receipt of a complete permit application and as part of NJPDES permit process. NJAC 7:15-3.2(a) and (c). Which projects are consistent is covered in NJAC 7:15-4.2 and which are inconsistent is covered in NJAC 7:15-4.3.

Most projects that generate greater than 2000 gpd or more and discharge to groundwater will be inconsistent under Subchapter 8. This includes 6 or more residential units on septic systems, non-residential of 2,000 gpd+ and most golf courses.

If a project is "inconsistent" with the WQMP, an amendment is needed.

A Plan Amendment takes 6 to 9 months but can take up to 1 to 2 years if there are substantive issues that must be resolved. It is encouraged that applicants have a pre-application conference to reduce the overall review timeline. It is also encouraged that municipalities refer projects for a CD BEFORE the planning board review process is deemed complete. Local government entities (i.e. Township Committee) must give approval to DWM for the amendment application review to begin (a form is submitted for signature to the local authority).

During the review process, DWM looks at the specific watershed issues outlined above. It is the intention of DWM that all "Executive Order-109" issues are covered in the review along with all the goals of NJAC 7:15. In the "team approach" that is being used to bring in all DEP permit reviewers, DWM attempts to evaluate the "carrying capacity" of the watershed when the WQMP is reviewed. They will also highlight permit issues that will need to be addressed by other Divisions, with a goal of making reviews more efficient.

At this point, DWM decides whether the proposed project meets DEP's objectives, which would make it an appropriate amendment to the Areawide and State Water Quality Management Plan.

After the review is complete, the amendment application is approved, denied, or returned for more information to the applicant, who then must return the final application within 90 days. Once the final application is received, Public Notice is published in the NJ Register and 2 local newspapers. There is a public comment period and a public hearing may be held (at DEP's discretion). The final decision on the amendment is made by DWM and published within 1 month in NJ Register.