

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF ENVIRONMENTAL PLANNING

AMENDMENT TO THE NORTHEAST WATER QUALITY MANAGEMENT PLAN

Public Notice

Take notice that on ~~MAR 19 1996~~ <sup>MAR 19 1995</sup>, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Statewide Water Quality Management Planning rules (N.J.A.C. 7:15-3.4), an amendment to the Northeast Water Quality Management Plan was adopted by the Department of Environmental Protection (Department). This amendment adopts a Wastewater Management Plan (WMP) for Verona Township, Essex County. Based on the delineation of the sewer service areas of the Verona Wastewater Treatment Plant (WTP) as identified in the WMP, the Verona Township WMP also amends the Caldwell Township, Cedar Grove Township and Joint Meeting of Essex and Union Counties (JMEUC) WMPs.

The Verona Township WMP proposes expansion of the sewer service area to the Verona WTP to address the following: a) abandonment of the Essex County Hospital WTP in Cedar Grove Township, which currently discharges into the Peckman River downstream from the Verona WTP, with connection to the Verona WTP; and, b) redirection of the wastewater flow at the Essex County Correctional Facility located in Caldwell Borough, North Caldwell Borough and Verona Township from the Caldwell WTP, which discharges into the Passaic River, to the Verona WTP. The redirection of flow from the Essex County Correctional Facility is an interbasin transfer of wastewater discharge from the Upper Passaic River basin to the Lower Passaic River basin. The flow to be served by the Verona WTP from the Essex County Hospital and Essex County Correctional Facility is a total of 0.5 million gallons per day (mgd), 0.25 mgd from each facility. In addition, the WMP delineates the portions of Verona Township, West Orange Township, Essex Fells Borough and Caldwell Borough included within the existing and future service areas of the Verona WTP. The Verona Township WMP specifies the total projected wastewater flow to the Verona WTP as an annual average flow of 3.01 mgd with a maximum month flow of 5.0 mgd.

This amendment proposal was noticed in the New Jersey Register on March 20, 1995. Comments on the amendment were received during the public comment period and are summarized below with the Department's responses. Some changes to the WMP were made in response to the comments received. The changes are indicated below and include 1) decreasing the projected wastewater flow to the Verona WTP from 3.13 mgd to 3.01 mgd, 2) removing an area of West Orange Township from the future sewer service area of the Verona WTP, 3) acknowledging Verona Township's agreement to endorse a future amendment to the Verona and Cedar Grove Township WMPs to address the Hilltop portion of Cedar Grove Township, and 4) identifying a general mitigation to offset the loss in Passaic River basin safe yield due to the transfer of wastewater from the Essex County Correctional Facility to the Verona WTP. The study and evaluation portion of the general mitigation plan are proposed to be completed within six months of the adoption of the Verona Township WMP. A schedule for implementation of the final plan will be established as part of the study and evaluation.

1. COMMENT: The Boroughs of Caldwell, North Caldwell and Essex Fells objected to the draft Verona Township WMP. Their objections were based on financial concerns relating to diverting the Essex County Correctional Facility flow from the Caldwell WTP.

RESPONSE: Based on an agreement reached by representatives of the Caldwell WTP, Verona Township and Essex County which addresses the Boroughs' concerns, the Boroughs of Caldwell, North Caldwell and Essex Fells have withdrawn their objections to the Verona Township WMP.

2. COMMENT: The Township of West Orange objected to the draft Verona Township WMP for the following reasons:

The draft WMP identified sections of West Orange as within the existing and future sewer service area of the Verona WTP. Directing sewage from sections of West Orange into the Verona WTP instead of into the collection system of West Orange for treatment at the JMEUC WTP 1) results in higher sewer user fees for property owners that are tied into the Verona system, 2) prevents future sewer users in those areas from contributing to the cost of recent improvements to the West Orange collection system, 3) forces developers of adjoining parcels to develop separate and distinct collection systems depending upon the receiving WTP, and 4) requires the rerating of the Verona WTP in excess of the current permitted flow of 3.0 mgd.

In addition, the West Orange collection system and the JMEUC WTP have available capacity to treat the additional flow from the existing and future development at the West Essex Highlands and High Tor Estates developments (both shown as within the existing service area of the Verona WTP). A diversion from the Verona system to the West Orange collection system could be accomplished easily by pumping from the existing West Essex Highlands pump station via an already installed dry force main in Oval Road to the gravity sewer in Eagle Rock Avenue. An even easier connection could be accomplished at the intersections of Forest Drive with either Cunningham Drive or Fairway Avenue. A few homes from the Verona section of High Tor Estates would be diverted into West Orange, but already 26 homes on Gerdes Avenue in Verona are sewered into West Orange. This latter connection, however, could not be performed until mid-1996 when the new Vitro pump station becomes operational.

Based on the above, the most efficient and cost effective way to sewer this section of West Orange is with one pump station with the collection systems integrated and connected to the West Orange collection system.

RESPONSE: The above comments relate to current contractual agreements between Verona Township, West Orange Township, and the West Essex Developers, Inc. As a result of the review of the contractual arrangements between the two communities and the developer, Verona recognizes that the 900 additional residential units which were originally included in the Verona Township WMP are not contractually bound to be tributary to the Verona WTP. Therefore, in a recent Council meeting, the Verona Township Council decided to remove the section of West Orange which would contain the 900 additional units from the Verona WTP future sewer service area. The Verona Township WMP was therefore revised to delete this area from the Verona WTP future sewer service area. However, the areas of previous development, consisting of the High Tor and West Essex Highlands developments, as well as the future 120 residential units within the West Essex Highlands Development are included in the previous agreement between the communities. In addition, the existing development within these areas is already served by the Verona WTP. As such, these areas must remain as part of the Verona WTP sewer service area at this time. The areas which have been removed from

the Verona WTP future sewer service area will remain as part of the JMEUC WTP service area as provided for in the JMEUC WMP.

By deleting the future 900 units in West Orange from the Verona WTP future service area, the total future flow to the Verona WTP is reduced to approximately 3.0 mgd. As such, there is no longer a need to expand or rerate the Verona WTP.

In addition to the above specified changes to the Verona Township WMP, the WMP has been corrected to account for the area of Verona Township along Gerdes Avenue which is served by the JMEUC WTP. This area has been removed from the delineation of the Verona WTP existing and future sewer service areas.

3. COMMENT: Cedar Grove Township objected to the draft WMP including the undeveloped and vacant "Hilltop" portion of the Essex County Hospital property within the Verona WTP proposed sewer service area. Instead, the proposed service area to the Verona WTP should be limited to the existing structures and sewer connections which are currently served by the Essex County Hospital WTP.

Further, the proposed WMP mapping is partially incorrect. As verified by Cedar Grove Township investigation, several existing buildings within the Essex County Hospital property are currently served by gravity sewer connections to the Cedar Grove WTP. These buildings should not be included in the proposed service area to the Verona WTP.

RESPONSE: As a result of discussions between Verona Township, Cedar Grove Township, and the Department, and the inclusion of a statement in the WMP addressing the Hilltop area, Cedar Grove Township has withdrawn its objections to the Verona Township WMP. The statement added to the WMP specifies the following: "The Hilltop area has been included in the Verona WMP since the area had been previously included within the area served by the Essex County Hospital Treatment Plant. The majority of the Hilltop area is currently undeveloped. The Township of Cedar Grove and Township of Verona have agreed that flow resulting from future development of the Hilltop area would be conveyed to the Cedar Grove Treatment Plant due to the lack of capacity at the Verona WTP. Due to procedural requirements, it is not possible to remove the Hilltop area from the Verona Service Area as part of this Amendment, however, Verona has agreed to endorse the provisions of a future Amendment of the Cedar Grove WMP which would include the Hilltop area." The Department has no objections to Cedar Grove Township proposing an amendment to the Cedar Grove and Verona Township WMPs to address the Hilltop area in this manner. Questions regarding projected populations, wastewater flows and service area boundaries for the Hilltop area will need to be addressed at that time.

With regard to the buildings on the Essex County Hospital property which are served by the Cedar Grove WTP, the WMP has been corrected to identify these buildings as outside of the Verona WTP future sewer service area.

4. COMMENT: With regard to the proposed transfer of flow at the Essex County Jail Facility from the Caldwell WTP to the Verona WTP, Cedar Grove commented that it would need assurances that this transfer and the associated Verona WTP rerating request would not adversely affect the NJPDES permit limitations of the Cedar Grove STP, nor should it result in reallocation of stream loadings as NJDEP permit activities suggest.



RESPONSE: Due to the removal of a portion of West Orange Township from the future sewer service area of the Verona WTP and the associated decrease in projected wastewater flow for the Verona WTP to approximately 3.0 mgd, a rerating of the Verona WTP is no longer proposed or required. Therefore, the addition of wastewater from the Essex County Correctional Facility should not adversely affect the New Jersey Pollutant Discharge Elimination System permit limitations of the Cedar Grove WTP nor cause a reallocation of stream loadings. As discussed above, Cedar Grove Township has withdrawn its objections to the WMP.

5. COMMENT: The North Jersey District Water Supply Commission (NJDWSC) and United Water New Jersey objected to the proposal to divert the wastewater flow at the Essex County Jail Facility from the Caldwell WTP to the Verona WTP. This diversion would result in the loss to the Wanaque South Project (WSP), a joint venture between the NJDWSC and United Water New Jersey, of as much as 0.25 mgd of water presently available to the WSP for diversion from the confluence of the Pompton and Passaic Rivers to the Wanaque Reservoir, a source of drinking water for numerous municipalities in northeast New Jersey. Thus, the Verona WMP, either singly or in combination with any other existing or proposed transfer, would cause a decrease in available water supply in the watershed such that it calls into question the ability of the WSP to maintain, at a minimum, the safe yield requirements under its existing water allocation permits. The loss of water due to the proposed diversion of the Jail's flows would reduce the diversion rights previously granted to the WSP by the Department in the water allocation permits.

RESPONSE: The Department agrees that transfer of wastewater at the Essex County Correctional Facility from the Caldwell WTP to the Verona WTP would result in a net reduction in safe yield to the water purveyors. To address this issue, representatives of the Department, the water purveyors, Essex County and Verona Township met to discuss alternatives/mitigation. Based on general agreement between the parties, Verona Township has developed a general mitigation plan as a means to mitigate the loss of safe yield. The mitigation plan includes importing at least 0.22 mgd of water into the Upper Passaic River basin, specifically into Essex Fells Borough, from the Lower Passaic River basin (the Essex County Hospital wells) as replacement water. In addition, Verona Township will decrease its water supply demand on the Upper Passaic River basin by drawing a certain amount of its water from the Essex County Hospital wells instead of from the Passaic Valley Water Commission.

The viability of the general mitigation plan is contingent upon a number of factors which must be subject to study, evaluations and negotiations. These factors include, but are not limited to: the availability of adequate water supply from the Essex County wells; compliance of the water supply with Safe Drinking Water Act Regulations; development of the required infrastructure to interconnect the water supply systems (Essex County and Verona); negotiations with Essex Fells to accept a more consistent water supply from Verona; and other hydraulic considerations.

Verona and Essex County have agreed to immediately proceed with the study, evaluation and subsequent implementation (if determined to be a viable alternative) of the general plan. It is planned to complete the study and evaluation within six months of the adoption of the Verona Township WMP. A schedule for implementation of the final plan will be established as part of the study and evaluation.

With this mitigation, the diversion rights granted in the purveyors' water allocation permits should be maintained. The Verona Township WMP has been revised to include a discussion regarding the general mitigation plan.

Note that since the water supply for the Essex County Correctional Facility is from wells operated by the Essex County Hospital, the Hospital will need to apply for a modification of its Water Allocation permit to reflect the change in discharge location at the Correctional Facility. This requirement is in accordance with the Water Supply Allocation rules, N.J.A.C. 7:19.

6. COMMENT: The following comment was provided on behalf of the NJDWSC and United Water New Jersey:

The Statewide Water Quality Management Planning (SWQMP) rules specify that "Existing regional DTW [domestic treatment works] shall be used where such use is cost-effective, environmentally sound, and feasible from an engineering standpoint. Expansion or upgrading of existing regional DTW is generally preferable to construction of additional DTW that would produce additional direct discharges to surface water at new locations." N.J.A.C. 7:15-4.3(d)1. The Verona WMP is inconsistent with this policy. There has been no demonstration by Verona that continuing the discharge into the Caldwell facility is not "cost-effective, environmentally sound, and feasible from an engineering standpoint". Based on the policy requirements of the SWQMP rules, absent such a demonstration by Verona, the regulation clearly states that its plan must be denied.

In addition, the Verona Township WMP violates the policy regarding expansion or upgrading of existing regional DTW. By proposing that the Essex County Correctional Facility effluent be sent to a totally different facility, i.e. the Verona WTP, the WMP "would produce additional direct discharges to surface water at new locations" which is expressly deemed not "preferable" by the regulation.

RESPONSE: The SWQMP rules, specifically N.J.A.C. 7:15-4.3(d)1, do not prohibit the Department from approving the Verona Township WMP. On the contrary, the intent of the policy specified in N.J.A.C. 7:15-4.3(d)1 is to prevent the construction of new WTPs discharging to surface water where existing regional WTPs can be used. This policy does not apply to the Verona Township WMP as both the Caldwell WTP and the Verona WTP are existing and no new WTPs discharging to surface water are proposed. The SWQMP rules, therefore, do not require a demonstration by Verona that continuing the discharge from the Essex County Correctional Facility into the Caldwell WTP is not cost-effective, environmentally sound, and feasible from an engineering standpoint.

However, the proposed transfer of flows to the Verona WTP was determined by the affected parties to be the most viable alternative for providing for treatment of the existing and projected flows at the Essex County Correctional Facility while at the same time providing capacity in the Caldwell WTP for development within the Caldwell system service area. In addition, mitigation is proposed to be provided to offset the loss to the Passaic River basin safe yield from transfer of the Essex County Correctional Facility flows to the Verona WTP. Therefore, the Department has adopted the WMP.

7. COMMENT: The following comment was made on behalf of the NJDWSC and United Water New Jersey:

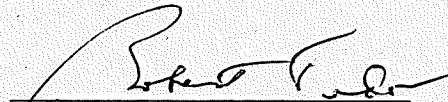
The Department had indicated that it would be proposing comprehensive procedural and substantive changes to the SWQMP rules sometime in early 1995. No action should be taken by the Department on the Verona Township WMP until the new SWQMP rules are issued and a more detailed and comprehensive determination of its impact on the WSP's interests can be undertaken utilizing the revised standards and policies set forth in the

new rules. Otherwise, there is a risk that any determination to be made with respect to the Verona Township WMP would be inconsistent with these new rules. It is believed that if the Verona Township WMP were subjected to the scrutiny demanded by these new standards and policies, it would either have to be denied or at the very least substantially modified from its present formulation.

RESPONSE: As discussed above, the WMP has been modified to reflect the commitment of Verona Township to a mitigation plan to offset the loss in safe yield from the transfer of flows at the Essex County Correctional Facility. The mitigation alternative is acceptable to the Department based on policies in effect at this time. Therefore, the Department has adopted the Verona Township WMP with the above referenced changes.

With regard to the SWQMP rules, changes are now proposed in two phases. In addition to addressing total maximum daily load development, and the water quality-limited water bodies list, the phase 1 rule proposal provides several changes to the amendment process and the thresholds for WMP development. This proposal was noticed in the New Jersey Register on February 5, 1996. The phase 2 rule proposal, which will include the incorporation of environmental objectives and substantive changes to WMP requirements, is still under development. That proposal will also include more definitive policies with regard to protecting water supply safe yields. The phase 2 rule proposal is anticipated to be proposed in early 1997.

This amendment represents only one part of the permit process and other issues will be addressed prior to final permit issuance. Additional issues which were not reviewed in conjunction with this amendment but which may need to be addressed may include, but are not limited to, the following: antidegradation; effluent limitations; water quality analysis; exact locations and designs of future treatment works (pump stations, interceptors, sewers, outfalls, wastewater treatment plants); and development in wetlands, flood prone areas, designated Wild and Scenic River areas, or other environmentally sensitive areas which are subject to regulation under Federal or State statutes or rules.



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Date

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