

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF WATER RESOURCES MANAGEMENT COORDINATION

Adopted Amendment to the Lower Delaware Water Quality Management Plan

Public Notice

Take notice that on **JAN 15 2016**, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., the Statewide Water Quality Management Planning rules (N.J.A.C. 7:15-3.4), and Public Law (P.L.) 2011, c.203, as amended and supplemented by P.L. 2013, c.188, an amendment to the Lower Delaware Water Quality Management Plan (WQMP) was adopted by the Department of Environmental Protection (Department). This amendment, prepared by the Salem County Planning Department and Sickels and Associates, and submitted on behalf of the Salem County Board of Chosen Freeholders, as the wastewater management planning agency, adopts a partial Wastewater Management Plan (WMP) for Salem County (Project Identification No. 435441, Activity No. WMP130003). The partial Salem County WMP incorporates the current Pennsville Township WMP; replaces the current Salem City, Alloway Township, and Quinton Township WMP; replaces the outdated Carneys Point Sewerage Authority (which includes Carneys Point Township and Penns Grove Borough), Lower Alloways Creek Township, and Woodstown Sewerage Authority WMPs; and creates WMP chapters for all 15 municipalities, including the following municipalities that never had an adopted WMP: Elmer Borough, Elsinboro Township, Mannington Township, Oldmans Township, Pilesgrove Township,

Pittsgrove Township, and Upper Pittsgrove Township. Upon adoption, all components of this partial WMP will share the same adoption date.

This amendment has been prepared pursuant to the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., the Water Quality Management Planning rule, N.J.A.C. 7:15, and Section 9 of P.L. 2011, c.203, as amended and supplemented by P.L. 2013, c.188, which allows the wastewater management planning agency to prepare and submit, and the Department to accept and adopt portions of a WMP, in addition to that portion that provided for the designation of a sewer service area (SSA). The Salem County Future Wastewater Service Area (FWSA) map, which designates SSA for Salem County, was adopted on September 19, 2013 (45 N.J.R. 2403(a)). Utilizing the adopted FWSA map, with the addition of approximately 148 acres of proposed SSA in Pittsgrove Township for the “Pepco development” (described in detail below), the County performed a County-wide build-out analysis, which determines future wastewater need, evaluated the capacity of treatment facilities to meet future wastewater needs, and completed a septic area carrying capacity analysis (referred to as “Nitrate Dilution Analyses” in the WMP) as well as a water supply availability analysis. The Salem County WMP summarizes the analyses and results in a County summary, while also detailing the analyses in individual municipal chapters. The WMP also includes maps depicting existing and future treatment works facilities and associated SSAs, sewer infrastructure mapping, municipal zoning, and environmentally sensitive area mapping on individual municipal maps as well as larger County-scale mapping. Finally, the WMP includes a Septic Management Plan and Appendices containing a separate nitrate dilution analyses report for non-compliant municipalities as described below, a

previously prepared WMP for Pilesgrove Township referenced in the Pilesgrove municipal chapter, and a septic area carrying capacity analyses for Pittsgrove Township prepared by Clarke Caton Hintz, all for reference only. The partial WMP does not included measures to address total maximum daily loads or incorporation of local ordinances governing riparian areas, steep slopes, and stormwater.

Where the visual depiction of future SSA on County and municipal mapping does not clearly indicate the specific SSA associated with the wastewater treatment facilities, the Statewide digitized Sewer Service Area mapping does. The publically available SSA mapping is available for viewing on NJ Geo-web at <http://www.nj.gov/dep/gis/geoweb splash.htm>. It is also available for download to use in ArcGIS at <http://www.nj.gov/dep/gis/stateshp.html>.

As stated above, this amendment adds approximately 148 acres of SSA to the previously adopted Salem County FWSA map on Block 2701, Lot 63; Block 3001, Lots 1, 2, 20, 22, 22.01, 38, and 39; and Block 3002, Lot 1, in Pittsgrove Township, Salem County for the “Pepco development,” which is pursuing a New Jersey Pollutant Discharge Elimination System (NJDPES) surface water discharge permit for approximately 12,000 gallons per day of wastewater. This site is also referred to as “Atlantic City Electric” in the Pittsgrove Township chapter. In accordance with N.J.A.C. 7:15-5.24, environmentally sensitive areas (ESAs) were assessed to determine what areas are appropriate for inclusion in the SSA. ESAs are defined, based on a composite geographic information systems (GIS) analysis, as contiguous areas of 25 acres or larger consisting of habitat for threatened and endangered species as identified on the Landscape Project Maps of Habitat for Endangered, Threatened or

Other Priority Species, Natural Heritage Priority Sites, Category One (C1) special water resource protection areas, and wetlands, alone or in combination. ESAs are required to be excluded from the SSA except as provided in accordance with N.J.A.C. 7:15-5.24(e)-(h).

This amendment removes from SSA a 300 foot C1 buffer on a Maurice River tributary in the northeastern portion of the Pepco site as well as a 300 foot C1 buffer on Muddy Run on the western portion of the site. Additionally, Landscape Project Mapping version 3.1 identified State Endangered Bald Eagle and State Threatened Red Headed Woodpecker habitats onsite. A Habitat Suitability Determination Report, completed by the Lomax Consulting Group (November 2013) was reviewed by the Department. The Department found, additionally, that Landscape Project Mapping version 3.1 did not incorporate a 2011 State Threatened Barred Owl sighting to the south, and, taking into account the suitability of Bald Eagle and Red Headed Woodpecker habitats, as well as Barred Owl, the Department recommended removal of these habitat areas from the SSA. The adopted SSA mapping reflects these recommendations at the Pepco site. The Department has determined that the removal of these ESAs from the SSA meets the requirements at N.J.A.C. 7:15-5.24(b). There were no Natural Heritage Priority Sites or wetlands identified on the site.

In accordance with N.J.A.C. 7:15-5.25(c) and (d)1 an environmental build-out analysis (build-out) was conducted for each SSA. For parcels in the existing SSA that are already connected to the associated treatment works facility, wastewater flow is calculated utilizing discharge monitoring report data (actual wastewater flows). Wastewater flow that would arise from undeveloped developable land within the future SSA is calculated in accordance with

N.J.A.C. 7:14A-23.3 using a parcel based method, utilizing zoning. The existing wastewater flow and future wastewater flow are combined to determine the total projected wastewater flow for each SSA and that total is then compared to the permitted capacity of the associated treatment works facility serving that area. The build-out for Penns Grove Borough is based on population data as detailed in the Salem County WMP instead of the parcel-based build-out method as this municipality meets the definition of an “Urban Municipality” as defined at N.J.A.C. 7:15-1.5.

In accordance with N.J.A.C. 7:15-5.25(d)2, potential wastewater generation from each SSA shall not exceed the permitted capacity for each facility. However, pursuant to P.L. 2011, c.203, as amended and supplemented by P.L. 2013, c.188, the Department, in consultation with the applicable wastewater management planning agency, may approve the inclusion of land within a SSA notwithstanding that existing treatment works may not currently have the assured capacity to treat wastewater from such land without infrastructure improvements or permit modification. Therefore, amendments may be approved if such actions are compliant with the applicable sections of the Water Quality Management Planning rule regardless of whether capacity has been fully assessed. The following facilities will require new or expanded capacity to accommodate the SSA at build-out: Carneys Point Sewerage Authority (SA) wastewater treatment facility, which is permitted to discharge 1.3 million gallons per day (MGD) serves Carneys Point Township and Oldmans Township. The SSA build-out for Carneys Point is 2.192 MGD and the SSA build-out for Oldmans is 1.362 MGD, with a total Carneys Point SA SSA build-out of 3.554 MGD, resulting in a future wastewater capacity deficit of 2.254 MGD. Elmer Borough’s SSA would discharge to a future facility, which

would need to treat 0.142 MGD of wastewater as projected by the build-out analysis, and the build-out for the proposed future Pepco SSA in Pittsgrove Township is projected to be 12,000 gallons per day.

In areas outside of SSAs, the wastewater management alternative is onsite discharge to ground water of 2,000 gallons per day or less, commonly referred to as septic systems. The assessment of water quality impacts from development on septic systems relies on nitrate concentrations; therefore, the septic carrying capacity analysis determines the capacity to support septic systems without violating the ground water quality standard for nitrate of 2 mg/L. The analysis compares the total number of septic systems allowed in each HUC 11 watershed, in each municipality (based on the number of acres per septic system allowable that provide adequate dilution of nitrate, calculated using the Department's Wastewater Estimator tool), to the total number of systems projected in the septic area based on current zoning. If the number of septic systems based on zoning is greater than the number of systems allowed to reach nitrate dilution standards, then that municipality does not meet the 2 mg/L standard. Even though P.L. 2013, c.188 allows portions of a WMP to be submitted and adopted, those phased portions must still comply with the nitrate dilution standard and the Water Quality Management Planning rule at N.J.A.C. 7:15-5.25. Salem County has adopted septic carrying capacity analyses for the City of Salem, Woodstown Borough, and Penns Grove Borough, all of which comply with N.J.A.C. 7:15-5.25(e) and the nitrate standard, while analyses for the remaining municipalities are not compliant and are included for reference only in Appendix A. These municipalities do not have sufficient ability to meet

nitrate standards as currently zoned, and have not yet taken measures to ensure compliance as outlined at N.J.A.C. 7:15-5.25(e)1iv-v.

In accordance with N.J.A.C. 7:15-5.25(e)3, it shall be demonstrated that areas to be served by individual subsurface sewage disposal systems (ISSDS), also called septic systems, are subject to a mandatory maintenance program, such as an ordinance, which ensures that all ISSDS are functioning properly. This shall include requirements for periodic pump out and maintenance, as needed. The Salem County WMP includes a Septic Management Plan, however, the plan is not mandatory, therefore not in strict compliance with N.J.A.C. 7:15-5.25(e)3. The Septic Management Plan develops a spreadsheet model utilizing Microsoft Access as the database to inventory current and new ISSDS in the County, outlines a notification process for updating homeowners of regular ISSDS maintenance schedules and for owners to report maintenance activity, includes methods for public education on ISSDS maintenance, and includes an assessment of existing software capabilities and available Salem County Health Department staffing to be utilized in an effort to define the database format and procedures that would complement available resources.

In accordance with N.J.A.C. 7:15-5.25(f), water supply analyses have been performed to evaluate whether the water supply needs can be met with existing, new or expanded water supplies that do not conflict with the currently adopted New Jersey State Water Supply Plan (NJSWSP). Where the Department determines that there is insufficient existing water supply available to provide for the needs identified based on existing water allocation permits and the available water supply established in the current NJSWSP, regional water supply plans or

adopted TMDLs, the WMP agency must identify measures to ensure an adequate water supply as outlined in N.J.A.C. 7:15-5.25(f)2i-iv. It should be noted that until such time that the NJSWSP, which was adopted in August of 1996, is updated, the Department is not requiring a comparison analysis of estimated water availability to water supply demand outside of public water supply areas. The results indicate that the water purveyor, New Jersey American Water (NJAW), supplying Carneys Point Township, Oldmans Township, and the Borough of Penns Grove, does not currently have sufficient water allocation to support future water demands projected by the plan, however, NJAW could supply more than the current allocation if necessary. Similarly, the Borough of Woodstown appears to have sufficient monthly allocation to accommodate the SSA water supply build-out, but the annual diversion may be exceeded if the complete SSA build-out is realized. As development occurs within the Borough, limited water supply alternatives such as interconnection to NJAW, construction of new wells, and desalination are available. Steps to be taken to ensure adequate water supply in Woodstown Borough are discussed in further detail in Woodstown's municipal chapter. Pittsgrove Township does not own or operate any public community water supply facilities, wells, or distribution mains; therefore the anticipated Pepco development in the Pepco SSA is proposing to utilize individual wells to meet the future water supply needs of the facility. The projected water demand for the Pepco SSA is 12,875 gallons per day. Water supply analyses have demonstrated that there is sufficient water supply available for all other development served by public water supply areas within the County.

This amendment proposal was noticed in the New Jersey Register on October 19, 2015 at 47 N.J.R. 2640(a) and comments were received from the WMP agency during the comment period.

The WMP agency provided comments that there was a duplicate paragraph in the Elsinboro chapter of the WMP document as well as incorrect information indicating that the municipality was not in the CAFRA area. The Department also noted that the Pennsville Township chapter summary did not expressly indicate that the previously adopted Pennsville Township WMP has been fully incorporated into the Salem County WMP, no longer a stand-alone document, taking on the expiration date of the County WMP. Additionally, the Department found that the following paper maps had errors: The County “Map 3 – Future Wastewater Service Area” incorrectly displayed an earlier version of the SSA mapping, showing small portions of wetlands in the SSA in Carneys Point Township, Oldmans Township, Salem City, Quinton Township, and Woodstown Borough that were previously removed from the adopted Salem County FWSA map, on which this WMP is based; Carneys Point Township municipal “Map 3 – Future Sewer Service Area” also inadvertently included wetlands; Pittsgrove Township municipal “Map 3 – Future Sewer Service Areas” inadvertently excluded SSA for NJPDES sites 30, 32, and 33; and City of Salem municipal “Map 3 – Future Sewer Service Area” erroneously removed all SSA. Upon review of comments made by the WMP agency and the narrative and mapping errors identified by the Department, the Department is adopting this amendment with minor changes to text in the WMP document pursuant to N.J.A.C. 7:15-3.4(g)9ii, removing duplicate text in the Elsinboro chapter, on page 1, and removing incorrect information that the municipality was not in the

CAFRA area, and providing clarification in the Pennsville Township chapter summary that the previously adopted Pennsville Township WMP has been fully incorporated into the Salem County WMP, as well as utilizing the correct Map 3s for each area identified above. These minor changes do not effectively destroy the value of the public notice of the amendment as they are technical/administrative corrections or clarifications only.

In addition to the specific comments addressed above, in response to Salem County's request for consent to this proposed amendment, Alloway Township, Carneys Point Sewage Authority, Carneys Point Township, Elmer Borough, Lower Alloways Creek Township, Oldmans Township, Penns Grove Sewage Authority, Pennsville Sewage Authority, Pilesgrove Township, Quinton Township, the Salem Board of Chosen Freeholders, Salem City, Upper Pittsgrove Township, Woodstown Borough, and Woodstown Water & Sewer Department all submitted resolutions consenting to the amendment. The following entities were asked to consent, however did not respond: Elsinboro Township, Mannington Township, Pennsville Township, the Delaware River Basin Commission, Penns Grove Borough, Elmer Borough Water Supply Department, Salem Water Department, and the New Jersey American Water Company.

This amendment represents only one part of the permit process and other issues may need to be addressed prior to final permit issuance. These issues may include, but are not limited to the following: compliance with stormwater regulations; antidegradation; effluent limitations; water quality analysis; exact locations and designs of future treatment works; development in wetlands and flood prone areas, or other environmentally sensitive areas which are subject to

regulation under Federal or State statutes or rules. Approval of this amendment does not eliminate the need for any permits, approvals or certifications required by any Federal, State, County or municipal review agency with jurisdiction over this project/activity.

Sewer service to any particular project is subject to contractual allocations between municipalities, authorities and/or private parties, and is not guaranteed by this amendment.



Colleen Kokas, Director
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Department of Environmental Protection



Date