## DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATERSHED MANAGEMENT

ADOPTED AMENDMENT TO THE TRI-COUNTY WATER QUALITY MANAGEMENT PLAN

Public Notice

NOV 1 9 2009 Take notice that on , 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 Tri-County Water Quality Management (WQM) Plan was adopted by the Department of Environmental Protection (Department). This amendment, submitted on behalf of the Bordentown Sewerage Authority (BSA), adopts a new BSA Wastewater Management Plan (WMP) and provides for the expansion of the BSA Black's Creek Sewage Treatment Plant (STP) sewer service area. BSA currently serves the municipalities of Bordentown Township and Bordentown City, Burlington County. Pursuant to N.J.A.C. 7:15-5.6 of the WQM Planning rules in affect at the time this amendment was submitted to the Department, the BSA had wastewater management planning responsibility for the entire area within the municipal boundaries of Bordentown Township and Bordentown City.

Currently, the Black's Creek STP (#NJ0024678) has a permitted capacity of 3.0 million gallons per day (MGD) and discharges to Black's Creek, a designated Category 2, (C2), Fresh Water 2 (FW-2) waterway as classified under the Surface Water Quality Standards, N.J.A.C. 7:9B. This amendment includes an expansion of the previously approved sewer service area of the BSA Black's Creek STP in several locations within Bordentown Township and Bordentown City. The

increase in the sewer service area is required in order to serve the future wastewater needs from proposed commercial and institutional growth and to allow for the connection of existing septic systems.

As part of this amendment, the sewer service area delineation within Bordentown Township and Bordentown City was adjusted in order to more accurately reflect the existing tax parcel boundary lines for these municipalities. As a result of more accurate digital parcel mapping and Geographic Information Systems technology, this WMP re-delineates portions of the sewer service area to accurately identify lots currently served by the BSA Black's Creek STP and revise the sewer service area to correspond to the boundary lines of lots proposed for connection to the sewer system.

This amendment was reviewed in accordance with Executive Order 109 (2000) (EO-109) and N.J.A.C. 7:15-5.18. This WMP incorporates an environmental constraints/build-out (build-out) analysis to identify future projected flow from the proposed service area to ensure there will be sufficient capacity at the BSA Black's Creek STP to accommodate future need. This build-out analysis was conducted for all parcels within the existing and proposed sewer service areas. The existing wastewater flow received at the BSA Black's Creek STP from Bordentown Township and Bordentown City was calculated as the total combined metered flow for the year 2007 expressed as the annual average of the monthly average flow in MGD. The projected wastewater flow was calculated in accordance with N.J.A.C. 7:14A-23.3 based upon the current municipal zoning and included potential development of all remaining parcels of vacant land, underdeveloped residential and commercial property and any existing parcels currently served by individual subsurface sewage disposal systems that are located within the future sewer service

area. Environmentally constrained areas were excluded from the sewer service area for purposes of projecting wastewater flow. The environmentally constrained areas excluded in projecting wastewater flow from the proposed sewer service areas included wetlands, preserved open space and documented flood prone areas or protected riparian corridor areas where development would be prohibited. The existing wastewater flow and calculated projected wastewater flow were combined to determine the total projected wastewater flow of the BSA Black's Creek STP service area. The total projected wastewater flow was determined to be 2.44 MGD.

In order to satisfy the Riparian Corridor Analysis, Bordentown Township adopted Ordinance No. 2007-27 and Bordentown City adopted Ordinance No. 2007-19 to ensure the protection of the riparian corridors along all perennial and intermittent streams and lakes within the municipalities. As required, the adopted ordinances establish and protect a Riparian Buffer Conservation Zone (RBCZ) of required width on both sides of the stream measured from the top of bank of an intermittent or perennial stream, or centerline if the bank is not defined, and from the defined edge of a lake, pond or reservoir at bank-full flow or level. The width of the RBCZ is to be based on the surface water body's classification designated at N.J.A.C. 7:9. For C2 water bodies, the RBCZ is a minimum of 75 feet. The RBCZ for C2 Trout Production (FW2-TP) waters is extended to 150 feet. For Category 1 waters, the RBCZ shall equal the Special Water Resource Protection Area as defined at N.J.A.C. 7:8-5.5 (h) or a maximum of 300 feet.

To satisfy the Nonpoint Source Pollutant Loading/Hydromodification Analysis, an ordinance ensuring compliance with the performance standards of the Stormwater Management Rules, N.J.A.C. 7:8, was necessary. To comply with this

requirement, Bordentown Township adopted Stormwater Management Ordinance #2006-7 and the City of Bordentown revised and approved Municipal Code Sections 237-23 through 32. As required, the ordinance and revised code indicate that the performance standards must be met through the use of non-structural measures, where possible. If non-structural measures alone are insufficient to meet the performance standards, then the proposed project must supplement with structural best management practices (BMPs), as necessary.

The Endangered or Threatened Species Habitat Analysis was performed utilizing the Department's Division of Fish and Wildlife, Endangered and Non-Game Species Program "Landscape Project". The Landscape Project identifies areas of critical habitat that support or potentially support Federal and State endangered or threatened species and other species of concern. Endangered and Threatened Species habitats reviewed under this analysis are Rank 5 (Federal endangered and/or threatened species), Rank 4 (State endangered species), or Rank 3 (State threatened species). This analysis determined that no new areas proposed for sewer service area expansion are designated as endangered and/or threatened species habitat Ranked 3, 4 or 5 Endangered or Threatened Species Habitat. Accordingly, the Analysis has been met.

The analysis to evaluate the groundwater impacts and septic system density for the development of those areas of Bordentown Township and Bordentown City that are outside of the proposed sewer service area has not been conducted as part of this amendment. The BSA WMP planning area is the entire area within the municipal boundaries of Bordentown Township and Bordentown City. However, not all areas within the WMP planning area are designated as either existing or future sewer service areas. Locations excluded from the existing and/or future

sewer service areas are designated as "Environmentally Constrained Areas (For Wastewater Facilities with Planning Flows of 2,000 GPD or Less which discharge to ground water). These areas include Preserved Farmland, Flood Prone Areas, Freshwater Wetlands, Landscape Project Data (Ranks 3, 4, 5), Township Parks, State Owned or Cross Acceptance Open Space or Surface Water Bodies.

The Black's Creek STP is subject to a Federal Environmentally Sensitive Area (ESA) grant condition included in the grant agreement executed between BSA and United States Environmental Protection Agency (USEPA) under project number C-34-0607-02. The Finding of No Significant Impact/ Environmental Assessment (FNSI/EA) for the grant to construct Black's Creek STP states that "ESAs (Environmentally Sensitive Areas) including wetlands, floodplains, steep slopes and parks and preserves have been excluded from the sewer service area." Unless a determination is issued by USEPA that the grant conditions do not apply, these areas cannot be connected for sewer service. Any determination that the grant condition does not apply to a particular parcel would be issued by the USEPA in the form of either a "waiver" or a "mapping revision". The waiver or mapping revision would indicate that the USEPA determined that any impact to environmentally sensitive areas that would result from the new development was deemed acceptable or deminimus, thus sewer connection to the lot is permissible. The BSA WMP would need to be amended to include the area affected by the USEPA action to be included into the sewer service area.

As a result of the USEPA grant condition, all identified environmentally sensitive areas have been removed from the sewer service area. Accordingly, those portions of the BSA WMP planning area not delineated as sewer service area at this time have been designated as "Environmentally Constrained Areas (For

Wastewater Facilities with Planning Flows of 2,000 GPD or Less which discharge to ground water). As such the evaluation of ground water impacts and septic system density was not conducted due to these areas being small, isolated environmentally constrained areas that do not lend themselves to regional zoning modifications.

Any proposed subdivision resulting in six or more dwelling units or any development with a wastewater design flow in excess of 2,000 gpd to be served by subsurface disposal systems within Bordentown Township or Bordentown City will be considered inconsistent with the WMP. A WMP amendment shall be required and the project must comply with the requirements outlined in N.J.A.C. 7:15-5.25(h)2 for conformance with the nitrate planning standard of two mg/l, using the Department's Recharge Based Nitrate Dilution Model.

The Water Use Analysis indicated that the Bordentown Water Department, which also serves Bordentown City, requested a modification to their existing water allocation permit (#5156) for an increased diversion from 96 million gallons per month (mgm) to 118 mgm. This represents an increase of 22 mgm. The Department has approved the requested increase of water supply that will serve future build-out as projected in this WMP. Thus, the Water Use Analysis has been satisfied.

This amendment proposal was noticed in the New Jersey Register on July 6, 2009 at 41 N.J.R. 2727(a) and no comments were received during the comment period.

This amendment represents only one part of the permit process and other issues may need to be addressed prior to final issuance of all appropriate permits. Additional issues which may need to be addressed 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 (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.

Lawrence J. Baier, Director

Division of Watershed Management

Department of Environmental Protection

Date