



July 17, 2014

Virginia Kearney
Deputy Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Dear Ms. Kearney:

The Smart Growth and Neighborhood Conservation Coordinating Committee (SGCC) met on July 9, 2014, to review a request by the Maryland Department of the Environment for a Priority Funding Area (PFA) exception for a sanitary sewer project in Southern Kent Island in Queen Anne's County.

Queen Anne's County is requesting a Priority Funding Area (PFA) exception to provide public sewer to 1,518 existing homes and a maximum of 632 vacant lots on Southern Kent Island (SKI) in an area that is not in the PFA. This project will provide public sewer to nine communities on SKI bordering the Chesapeake Bay and the Eastern Bay.

The Program /Funding Source for the project includes \$ 37.4 million in State Revolving Loan (SRF) funds for four phases of construction and \$ 11.76 million in Bay Restoration Funds (BRF) to cover the WWTP fee of \$7,750 for each of the existing 1,518 homes.

MDE presented information to the SGCC that this area is of significant public health and environmental concern due to the large number of septic systems penetrating groundwater. Currently, almost all of the septic systems in the SKI service area discharge directly into groundwater and 70% are in the Critical Area, which means that they are within 1,000 feet of the Chesapeake Bay or Eastern Bay. The SKI region has a high groundwater table and soils with poor permeability. These two characteristics are unsuitable for on-site sewage disposal systems (OSDS). The high groundwater results in insufficient treatment of pathogens found in sewage. The poor surficial soil permeability limits the utilization of alternative systems that do not penetrate groundwater, such as mound systems. These site characteristics also facilitate the delivery of nitrogen to the Chesapeake Bay. In addition, most of the lots are too small for replacement OSDS systems. However, even if the lots were larger, innovative systems at this location would not

eliminate the liquid component of sewage, treat pathogens, or reduce nitrogen loads adequately to alleviate the public health and environmental concerns.

The replacement of OSDS systems on SKI is not a feasible alternative according to MDE. The County's proposal to provide public sewer will overcome the site limitations of the region by segregating the sewage effluent from the high groundwater and will provide superior treatment of the effluent at the existing Kent Narrows / Stevensville / Grasonville (KNSG) wastewater treatment plant (WWTP) by eliminating pathogens as well as reducing the nitrogen loads to Enhanced Nutrient Removal (ENR) levels.

The SKI Sanitary Project proposes to serve 1,518 existing homes and a maximum of 632 vacant lots out of a potential of 1,600 vacant lots in the proposed SKI service area. As to the 632 vacant lots in the proposed SKI service area, the 2005 Opinion of the Attorney General indicates that service should generally be provided to vacant lots adjacent to a sewer line (with certain exceptions). To minimize infill while complying with the Attorney General's Opinion, the County is implementing several measures. First, the County purposely did not increase the density in the SKI area (by not designating this area as a growth area) and did not seek a PFA designation. Second, the County designed the sewer service area to exclude large blocks of vacant lots from the service area and to only include vacant lots interspersed among existing homes. Third, the County reduced the number of potential vacant lots through adoption of a Lot Consolidation Ordinance. Fourth, the County allocated a limited amount of capacity (500,000 gpd) at the KNSG WWTP to serve just the existing homes and vacant (consolidated) lots in the service area. Fifth, the County included a "denied-access" designation on the main sewer line in its draft Water & Sewer Plan to prevent additional sewer connections. Finally, the County will further acknowledge the location of the service area and the maximum number of sewer connections allowed when it signs agreements with MDE for grants. (The grant conditions considered necessary to alleviate a significant health hazard have been upheld by the Maryland courts.) Although the County proposes to serve a maximum of 632 vacant lots, the County anticipates that only 560 vacant lots will ultimately be served due to environmental site constraints and historical build-out patterns. The County's actions have thus reduced the amount of infill development in the SKI service area from a potential of 1,600 lots to a maximum of 632 lots, a reduction of almost 1,000 lots.

MDE estimates that 30,400 pounds per year of nitrogen are currently being discharged into the Bay from the SKI service area. Once connected to the KNSG wastewater treatment, MDE estimates that 13,100 pounds per year of nitrogen will be discharged from the SKI service area. This is a reduction of 17,300 pounds per year of nitrogen, which far exceeds the nitrogen reduction from alternative OSDS systems. This reduction in nitrogen loads will also help the County reach about 33 percent of its septic system goal for the Chesapeake Bay Watershed Implementation Plan (WIP).

The SKI Sanitary Project strikes a balance between solving a significant public health problem and allowing a limited amount of infill development. Almost all of the septic systems in the proposed service area are discharging untreated sewage into groundwater. Because of high groundwater, poor soil permeability and small lot sizes, the replacement of

OSDS systems on SKI is not a feasible alternative. On the other hand, the proposed SKI Sanitary Project will provide superior treatment of sewage at the KNSG wastewater treatment plant by eliminating pathogens as well as reducing the nitrogen loads to ENR levels. Given the constraints of State law concerning the provision of sewer service to vacant lots and the ability of the SKI residents to afford an effective solution to this significant public health problem, the SKI Sanitary Project is the best alternative.

The Committee voted to approve this as an exception for the provision of sewer service outside of the PFA based on the applicable criteria of the PFA law: that the project is necessary to protect public health or safety. As approved by the Committee, the PFA exception is subject to the following conditions and failure by the County to implement or comply with any one or more of these conditions may result in revocation of the approval:

1. The provision of sewer service under this PFA exception shall be limited to 1,518 existing single family homes and to no more than 632 currently vacant lots, as shown on the attached sewer service area maps. Service to the vacant lots is to be for single family residential use only. Sewer Service Area maps, clearly delineating the sewer service area boundary, shall be submitted to MDE for approval as an amendment to the county's Master Water and Sewer Plan and referenced in the county's comprehensive plan.
2. The county shall report on the status of the provision of sewer service and compliance with these conditions annually through its annual report submission to MDP. The report should include the number and location of new connections.
3. The sewerage capacity to be provided within the sewer service area as shown on the attached maps shall not exceed 500,000 gpd. Except for certain non-residential properties as discussed below, each of the lots to be served shall be assigned one EDU which shall not be transferable to another lot. This allocation of maximum capacity shall be submitted to MDE for approval as an amendment to the county's Master Water and Sewer Plan.
4. Sewer service to the Kentmorr marina property and other non-residential uses in the service area shall be allocated based upon the existing uses or to the equivalent amount of capacity should an existing use change before service is provided.
5. The project must ensure denial of access for any future connections that are not included in the project's service area. This provision must also be incorporated into the county's Master Water and Sewer Plan.
6. The county shall adopt provisions in its floodplain ordinance in conformance with the 2013 model Maryland Floodplain Ordinance, requiring all new, substantially improved, and reconstruction of substantially damaged structures as meeting or exceeding the requirements of the 2013 model Maryland Floodplain Ordinance, that are located within a mapped Special Flood Hazard Area, to be constructed with a minimum of two (2) feet of freeboard above the 100-year base flood elevation, as defined by the National Flood Insurance program.

7. Queen Anne's County, with the technical assistance of the Maryland DNR, shall more thoroughly assess climate change impact vulnerability and outline specific strategies for enhancing resilience to the impacts of climate change (i.e., sea level rise, coastal storm surge, drought, and extreme precipitation related events).

Additionally, though not a condition of approval, Queen Anne's County is encouraged to work with the Maryland Department of Housing and Community Development to identify opportunities and resources that can be directed toward the provision of affordable housing within the service area.

Should you have any questions, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Josephson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Richard Josephson, AICP
Director of Planning Services
Chair, Smart Growth Coordinating Committee

CC: Richard E. Hall, Secretary, MDP
Todd Mohn, Queen Anne's County
Steve Cohoon, Queen Anne's County