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DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
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OFFICE OF THE
SECRETARY

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Secretary's Order No. 2010-CZ-0022

Re: Application of Tidewater Environmental Services, Inc. for a Coastal Zone Act Permit for Wandendale Regional Wastewater Treatment and Disposal Facility near Lewes, Sussex County. CZA Project No. 386P

Date of Issuance: **July 23, 2010**
Effective Date: **July 23, 2010**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control (Department) by *29 Del. C. §§8001 et seq.*, *7 Del. C. Chapter 60* and the Coastal Zone Act, *7 Del. C. Chapter 70 (CZA)*, the following findings, reasons and conclusions are entered as an Order of the Secretary:

Procedural History and Factual Background

This Order considers the CZA permit application submitted by Tidewater Environmental Services, Inc. (Applicant) to use land in the Coastal Zone to build and operate a 3 million gallon per day (gpd) wastewater treatment and disposal plant to be known as the 'Wandendale Regional Wastewater Treatment and Disposal Facility' (Facility). The application was reviewed in the Secretary's Assessment Report, as published April 24, 2010 and which formally commenced the Department's CZA review process. The Department held a public hearing on May 19, 2010 before presiding

hearing officer, Robert P. Haynes, who prepared a Hearing Officer's Report (Report), dated July 22, 2010, recommending issuance of a CZA permit. He relied on a recommended record and the Department's experts who contributed technical advice in a Technical Response Memorandum and prepared a draft permit. I adopt the Report to the extent it is consistent with this Order.

Discussion and Reasons

The Applicant is the first to seek a CZA permit for a privately owned sewage treatment plant. The Facility's location in the Coastal Zone and its purpose to serve up to 10,000 residential customers, most of which would reside outside the Coastal Zone, was the subject of numerous comments in opposition. The public comments cited the Department's comments submitted to Sussex County, which opposed the conditional land use application. The Department acknowledges that it, along with other State agencies, once opposed the Facility as it was under review by Sussex County. Despite objections by the State and public, Sussex County approved a conditional use for the Facility. Similarly, Sussex County has authorized residential development to occur, and the residential development will require some form of wastewater treatment and disposal system. The Facility is proposed to meet the residential sewer utility requirements of the anticipated 8,400 new residential unit and 1,600 existing residential units within the Applicant's Public Service Commission approved and regulated utility service territory. The Facility proposes to utilize a combination of spray irrigation and rapid infiltration basin technology for treatment and disposal of the wastewater.

The Report discusses the difference between the local land use regulation by Sussex County and the Department's regulation under the CZA. The Department continues to be frustrated by local land use decisions that allow development in more rural, Level 4 areas despite significant environmental impacts, such as degradation of air and water quality, loss of habitat and additional demands for infrastructure such as roads and schools and public services such as police and fire protection and specialized transit. However, the Department's duty is to review the proposed Facility solely under the CZA, and I find that the record, on balance, does not provide sufficient support to prevent issuance of a permit under the CZA, but such a permit will include special permit conditions that will protect the Coastal Zone's environment for recreation and tourism uses.

The most significant issue raised by the public comments was whether the Facility's wastewater treatment and discharge would cause a negative impact to the Coastal Zone's environment. I have thought long about this issue and believe that the decision by Sussex County to approve residential development in this area, despite the opposition by multiple State agencies, makes development in this area inevitable. It is this decision by Sussex County to allow development in a Level 4 area and not the Facility itself that will impact the rate of growth. If development is going to occur, the strong preference of the Department is to ensure that enhanced treatment services are provided through a central wastewater system, rather than allowing greater discharge of pollutants from on-site septic systems or other legally available options in amounts that will far exceed the discharge levels from the proposed Facility. Further, the proposed

Facility presents an opportunity to eliminate septic systems used by 1,600 existing homes through the connection to the proposed wastewater system.

The Applicant has also articulated that the Facility will provide an opportunity to protect open space and keep local agricultural lands in operation through the provision of spray irrigation on demand. Spray irrigation will remove additional nutrients from entering the Inland Bays, even beyond the proposed tertiary treatment levels, and should be pursued to the greatest extent practicable.

The Department continues to have concerns about the appropriateness of rapid infiltration basins in Sussex County and the long-term consequences on water quality should such a system fail. As a result, the Department will require high performance standards, sound geologic science, and a rigorous technical review as part of the wastewater construction permit process. Members of the public and the Department have also expressed concerns about the proposed location of the RIB near Love Creek in a wellhead protection area. In its preliminary review of the project through the State's PLUS process, the Department stated that "the Rapid Infiltration Basin (RIB) proposed on the northern portion on the combined parcel area should not be sited adjacent to the headwater tributary connected to Love Creek, nor should forest cover be removed to accommodate it. Doing so will increase the volume of water discharged to the creek while potentially decreasing water quality. DNREC strongly recommends that the RIB system be relocated to a more suitable location and the forest cover retained." In response to these concerns, the Applicant will be required to relocate the RIB to a more appropriate location.

Following a thorough review, a CZA permit should be issued with conditions because it will prevent the installation of thousands of septic systems and allow possible connections to an enhanced treatment system, which is consistent with the Department's commitment to improving water quality and the Inland Bays Pollution Control Strategy. The only way the water quality in the Inland Bays will be improved is to reduce the amount of pollutants discharged into the watershed. The Facility will provide one way to achieve the pollutant discharge reduction goals from development and improve the Inland Bays' water quality to help meet federal and state standards.

The Department's experts in the Coastal Zone Program and the Division of Water Resources recommend special conditions to protect the environment and Coastal Zone, and the Report recommends adoption of these conditions. I agree and find that they are necessary to strike the correct balance between allowing some new manufacturing use within the Coastal Zone while safeguarding the Coastal Zone for primarily recreation and tourism uses. The Department will require six conditions as part of the CZA permit:

1. Reduce the design capacity from 3 million gpd to 1.45 million gpd, which is a condition that is consistent with the Department's groundwater impact assessment of the project.
2. Submit to the Department as part of its construction permit a plan to minimize the facility's environmental footprint and submit a plan for reforestation equal to 130% of the estimated loss of mature forests.
3. Fulfill the recommendations of the Department's Natural Heritage report on the Facility to protect the wildlife and natural resources from harm from the Facility construction and operation.

4. Submit an operating plan as part of the construction permit application that uses spray irrigation as the preferred discharge method to the greatest extent practicable, particularly during the early phases of the project to maximize the environmental and agricultural benefit and a preferred use of spray irrigation of agricultural areas over use of wooded areas.
5. Relocate the rapid infiltration basin on the northern portion of the combined parcel area to a more appropriate location in consultation with the Department.
6. Submit as part of the construction permit application a surface water assessment report to ensure that the Facility will comply with the Total Maximum Daily Loads for the surrounding watersheds.

Conclusions

Accordingly, I direct that the permit be issued to the Applicant, and enter the following findings and conclusions:

1. The Department has jurisdiction to issue a CZA Permit to the Applicant subject to reasonable permit conditions deemed appropriate and consistent with the CZA's purposes;
2. The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and its regulations;
3. The Department held a public hearing in a manner required by the law and its regulations;

4. The Department considered all timely and relevant public comments in making its determination;

5. The Department shall issue a permit to the Applicant and the permit shall include conditions requiring that the Applicant: 1) submit to the Department as part of its construction permit a plan to minimize the facility's environmental footprint and submit a plan for reforestation equal to 130% of the estimated loss of mature forests; 2) submit a construction permit application based upon a design limit of 1.45 million gpd, which is a reduction supported by the Department's groundwater impact assessment; 3) submit as part of its construction permit a plan to comply with the recommendations within the Natural Heritage Program's report; 4) include an operating plan as part of the construction permit application that uses spray irrigation as the preferred discharge method to the greatest extent practicable, particularly during the early phases of the project to maximize the environmental and agricultural benefit and a preferred use of spray irrigation of agricultural areas over use of wooded areas; (5) relocate the proposed rapid infiltration basin to a more appropriate location and submit such a plan through the construction permit process, and; (6) submit as part of the construction permit application a surface water assessment report to ensure that the Facility will comply with the Total Maximum Daily Loads for the surrounding watersheds.

6. The Department carefully has considered all the statutory factors to be considered in making a decision on a CZA permit application under the CZA and its regulations; and

7. The Department shall publish legal notice this Order and otherwise provide notice as to all affected persons in a manner consistent with the public notice required by the law and the Department regulations, and shall post on the Department's web site.

A handwritten signature in cursive script, reading "Collin P. O'Mara", written over a horizontal line.

Collin P. O'Mara
Secretary