

**SECRETARY'S ENVIRONMENTAL ASSESSMENT REPORT  
FOR A COASTAL ZONE ACT PERMIT APPLICATION**

**Re: DuPont Edge Moor**

**June 2011**

**Introduction**

As required by the "Regulations Governing Delaware's Coastal Zone" (Section 8.3.4) dated May 11, 1999, and amended October 1, 2001, the Secretary is required to make an environmental assessment of the impact(s) of the project on the Coastal Zone of Delaware. This is done by evaluating the project's likely impact on the statutory and regulatory criteria and making a preliminary determination of the sufficiency of any Offset Proposal. The following is such an environmental assessment of the proposed project described in an application for a Coastal Zone Act (CZA) Permit, received from DuPont Edge Moor.

The fact that DNREC considers an application to be preliminarily, administratively complete does not constitute the Department's position as to whether the application should be approved or denied. That decision will not be made until after the public hearing. The purpose of the Secretary's written assessment is to assist the applicant and the public to focus on issues presented in the application. It constitutes an administrative determination that the application is sufficient to proceed to a public hearing. In addition, should the Department eventually issue the CZA Permit, it does not automatically guarantee the applicant will receive other required permits.

**The Proposed Project**

Since 1984, Edge Moor has been supplied with 100% of its steam needs from the neighboring coal-fired plant, Calpine's (Conectiv) Hay Road steam generation facility. Prior to that time, Edge Moor provided its own steam generation. The steam that is presently generated for DuPont is using a 26-year old steam-to-steam reboiler and required the large coal boilers to be in operation to provide steam for the reboiler operation.

DuPont Edge Moor is proposing to install two natural gas-fired packaged boilers (48.16 MMBTU/hr each). The steam generated from the boilers will be used to provide process heating and comfort heating.

**Sufficiency Statement**

This application for a CZA Permit, including supplemental information, has been reviewed by the Department to determine its completeness. After a thorough review of the company's application and file, the Department considers this application to be administratively complete and sufficient for proceeding to public hearing.

## Environmental Assessment

The proposed installation has the potential (if both boilers are running 24/7, which is unlikely) to emit the following criteria pollutants:

NOx 16.45 tons/yr  
CO 16.88 tons/yr  
VOC 2.27 tons/yr  
PM 3.14 tons/yr  
SO<sub>2</sub> 0.25 tons/yr

The boiler operation will generate blowdown at the rate of 24 gallons/min (max); this will be routed to the City of Wilmington waste water treatment plant. The site expects an increase of 0.14 ppm of BOD in the water discharge. There will not be an increase in stormwater flow at the site. The proposed project will use purchased water from United Water Company; the site estimates an average use of 92 gallons/min (max) of intake water.

The following new additives will be added to the condensate:

Softening Salt 7 gallons/min  
Amines 4-8 gallons/day

The amines will be used to control pH in the condensate that is discharged to the steam traps, resulting in approximately 0.0007 pounds/yr (considered to be a solid waste). In addition, the project will generate approximately 13,000 pounds of one-time construction debris which will be disposed of in the appropriate landfills. No new hazardous waste will be generated as a result of this project. Because this operation will be taking place within the existing Edge Moor facility footprint, there will be no impacts to wildlife habitat.

## Offset Proposal

The following table summarizes the emissions generated by the proposed project and the offsets that will be provided:

Pollutant	Proposed Project Emissions (Tons/Yr)	Emission Offset (Tons/Yr)	Offset Ratio
NOx	16.45	21.39	1.3:1
CO	16.88	21.94 of NOx	1.3:1
VOC	2.27	2.96 of NOx	1.3:1
PM	3.14	4.09 of NOx	1.3:1
SO <sub>2</sub>	0.25	0.32 of NOx	1.3:1

DuPont Edge Moor intends to offset environmental impacts from the project by providing \$250,000 towards a NOx emissions reduction project offsite (fully described on pages 26 and 27 of the May 20, 2011 revised application). This project will reduce NOx emissions by up to 65 tons/yr; DuPont Edge Moor will only need approximately 51 tons of emission reduction to offset

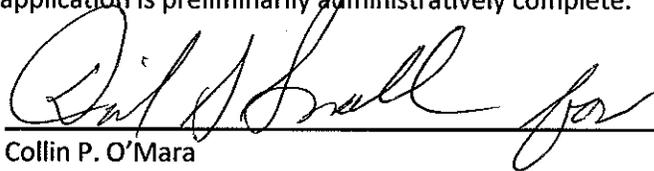
the air emissions from the project. There will also be corresponding reductions of CO, VOC, PM, and SO<sub>2</sub> from the electrification project. Additionally, there will be reduction of noise and odor for local residents.

As discussed in the Environmental Assessment section above, the water discharge and solid waste generated from the proposed project are minimal. The Offset Proposal is judged to more than offset the overall environmental impact of the proposed project.

**Conclusion**

The company's application is preliminarily administratively complete.

**Approved:**

  
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Collin P. O'Mara  
Secretary

**Date:**

6/13/11  
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