

HEARING OFFICER'S REPORT

TO: The Honorable Shawn M. Garvin
Cabinet Secretary, Department of Natural Resources and Environmental Control

FROM: Theresa L. Newman
Regulatory Specialist, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: Application of Delaware Storage and Pipeline Company, for a Coastal Zone Act Permit to construct a new storage building and undergo a process change to inject chemicals into the jet fuel supplied to Dover Air Force Base onsite at its existing facility located at 987 Port Mahon Rd., Little Creek, Delaware.

DATE: November 26, 2019

I. BACKGROUND AND PROCEDURAL HISTORY:

A public hearing was held on Tuesday, November 19, 2019, at 6:00 p.m. at the Department of Natural Resources and Environmental Control (“DNREC” or “Department”) located at 89 Kings Highway, Dover, Delaware, to receive comment on the application of Delaware Storage and Pipeline Company (“Applicant” or “DSPC”), for a Coastal Zone Act (“CZA”) permit from DNREC, pursuant to *7 Del. C., Ch. 70, Coastal Zone Act*. The CZA regulates new manufacturing activities, or the expansion of existing manufacturing uses, within Delaware’s “Coastal Zone”, which is a geographic area along the Delaware Bay, Inland Bays, and Atlantic Ocean Coastlines, as defined by the CZA. This hearing was held pursuant to Delaware’s *Coastal Zone Act* and *7 DE Admin. Code 101, Regulations Governing Delaware’s Coastal Zone* (“CZA Regulations”).

The Applicant, DSPC, serves as the sole provider of jet fuel for Dover Air Force Base (“DAFB”), located in Kent County, Delaware. Pursuant to the Applicant's CZA permit

application received by the Department on October 15, 2019¹, DSPC seeks permission to construct a new storage building and undergo a process change to inject three jet fuel additives (an anti-static agent, corrosion inhibitor, and icing inhibitor) into the jet fuel supplied to DAFB onsite at its existing facility located at 987 Port Mahon Road, Little Creek, Delaware (“Application”). Historically, these fuel additives have been blended prior to delivery to the Applicant’s facility, however, the U.S. Department of Defense is now looking to bring consistency and cost-effectiveness to its fuel delivery and handling systems by requiring facilities such as DSPC to have the necessary equipment onsite to add these products into their fuel delivery systems. It should be noted that these fuel additives already exist within the jet fuel currently delivered to the DAFB, and are federally regulated to meet North Atlantic Treaty Organization standards to enhance safety and operational purposes.

The DSPC facility has been in operation since 1960, and is defined as a heavy industry use that was in operation as of June 28, 1971 by Delaware’s *Coastal Zone Act*, specifically, at 7 *Del.C.* §7002(d). Thus, DSPC is grandfathered as a non-conforming use under the CZA. As such, no CZA permit currently exists for this site. In 2018, DSPC submitted a request for a status decision (CZA Project 434SD) and was subsequently notified by the Department that the above noted proposed activity would require a CZA permit.

The proposed process would require DSPC to construct a 242-square-foot building to hold two separate 250-gallon metal totes for storage of the anti-static agent and corrosion inhibitor. They also plan to use a 12,000-gallon horizontal tank to store the icing inhibitor. Both of these additions would be constructed within an existing tank farm on the property. The anti-static agent and corrosion inhibitor are proposed to be delivered to the facility in 55-gallon drums

¹ The receipt date does not determine when an application has been deemed administratively complete, pursuant to CZA Regulations 8.5.1 and 8.5.5. The application was deemed administratively complete on October 25, 2019.

and transferred to the totes using a valve injection system, where they would be fed into the pipeline conveying jet fuel from the barge dock to the storage tanks. The icing inhibitor would be delivered via tanker truck, approximately 5,000 gallons at a time, and then offloaded from a tanker and pumped into the 12,000-gallon storage tank through a dedicated pipeline.

The Applicant has modeled its proposed process based upon a similar process currently utilized at McGuire Air Force Base (“McGuire”) in New Jersey. The McGuire Operations and Monitoring protocols were relied upon by DSPC in the development of the proposed process for its existing Delaware facility, and details regarding those protocols are included in the Application. The Applicant maintains that such documentation contained within its Application demonstrates that DSPC will have appropriate training and safety protocols in place at its Delaware facility to ensure safe operation of the proposed process. The Applicant further maintains, however, that the public release of such documentation may ultimately jeopardize the security of sites such as DSPC, and thus the Applicant has requested that the same be kept confidential by the Department at this time.

The Department requires a CZA Applicant to set forth in its application the proposed project's possible environmental impacts, including, but not limited to, any increased air emissions of pollutants, water quality/water quantity/water use, and the disposal of solid and hazardous wastes. Furthermore, any application for a CZA permit for an activity or facility that will result in any negative environmental impact shall contain an offset proposal. Offset proposals must more than offset the proposed environmental impacts of any proposed project.²

Pursuant to Section 8.3.2 of Delaware's CZA Regulations, the Secretary shall, in assessing CZA permit applications, consider how a proposed project will affect the following six

² 7 DE Admin. Code 101, *Regulations Governing Delaware's Coastal Zone*, Section 9.0, "Offsets"

criteria, as set forth in 7 *Del. C. Ch. 70, Coastal Zone Act*: (1) Direct and cumulative environmental impacts; (2) Economic effects; (3) Aesthetic effects (4) Number and type of supporting facilities and their anticipated impacts; (5) Effect on neighboring land uses; and (6) Compatibility with local comprehensive plans. 7 *Del. C. § 7004(b)*.

The proposed project will result in *de minimis* air emissions associated with the delivery via truck of the three jet fuel additives, as described above. There will be an estimated 18 deliveries annually, with diesel trucks traveling approximately two miles within the Coastal Zone per delivery, at an assumed speed limit of 25 miles per hour. The Applicant estimated emissions using the Average In-Use Emissions from Heavy-Duty Trucks (EPA 2008) to calculate the grams of each pollutant per mile.

The Applicant estimates air emissions from the icing inhibitor to be approximately 1.23 pounds per year (0.000615 tons per year), which includes times of filling and emptying, as well as stagnant conditions. These emissions added to those associated with the truck traffic amount to approximately 3.68 pounds per year (0.001842 tons per year). The anti-static agent and corrosion inhibitor will be stored in sealed containers in a metal building and injected into the fuel through a closed system.

The proposed change in operation will not result in changes in water use, nor in water discharge to surface waters. Additionally, the proposed construction is less than 5,000 square feet of impervious surface, and is therefore not subject to the Department's regulatory requirements for stormwater management under 7 DE Admin. Code 5101 § 1.4.2. Stormwater will infiltrate onsite around the structures. The proposed project site is small and flat. Building construction and tank and pipeline installation will result in minor, temporary soil disturbance.

Any solid waste created as a result of the construction of the project will be collected, transported, and disposed of at an appropriate facility. Empty containers of anti-static and anti-corrosive additives will be removed and disposed of appropriately. There will be no generation of hazardous waste.

Wetlands exist within the land parcel, but not within the proposed construction area. Wetlands will not be impacted by project activities. No other habitats for flora and fauna exist in the proximate area. Additionally, the project is in keeping with the existing general industrial zoning for the site, and for the existing infrastructure of the tank farm. The proposed activity will be similar to existing activity.

With regard to threatened or endangered species, the project location is close to the Delaware Bay, where migratory shorebirds such as the red knot stopover in the spring and fall. The red knot is listed as a threatened species, however, the project will not impact the shoreline, and the birds are not known to nest on the project site.

Insofar as anticipated economic impacts, short-term employment opportunities will be created during the estimated 8-week construction period of the project. Welders, as well as concrete and building installers, are estimated to earn \$8,000 per week. No new employees will be hired at the site as a result of this project. There are no expected economic impacts due to environmental degradation, as such impacts are *de minimis*.

As noted previously, the existing facility has been in operation since 1960, and includes several storage tanks and operational buildings that are visible from Port Mahon Road. The proposed project will add one storage tank and one small building to the structures currently existing at the Applicant's site. These are consistent with the current aesthetics. No changes to supporting facilities are proposed.

There is no anticipated effect on neighboring land uses associated with the proposed project. The closest residence is approximately 1,110 feet away from the project location. The facility does not interfere with a person's ability to access recreational facilities or resources. In the event of a "worst-case" scenario where the entire contents of the 12,000-gallon tank spilled, the environmental impacts are not expected to interfere with nearby existing businesses, commercial, or manufacturing uses. Insofar as the proposed project's compatibility with county and municipal comprehensive plans, the Applicant was granted an approval (effective January 17, 2019) from the Kent County Board of Adjustment ("Board") for a variance to enable a 5% expansion of a legal non-conforming fuel storage facility, per Department Exhibit # 2, attachment 5. In its Notice of Decision, the Board noted that there is no negative impact to adjacent property owners, and that the proposed project represents a modest increase to the Applicant's current facility.

As noted previously, the Applicant's proposed project anticipates minimal air emissions and environmental impacts. Section 9.1.1 of the CZA Regulations states that any application for a CZA permit for an activity or facility that will result in a negative environmental impact shall contain an offset proposal. Moreover, such offset proposals must "...more than offset the negative environmental impact associated with the proposed project of activity requiring a permit." DNREC Policy stipulates that negative environmental impacts resulting from projects requiring a CZA Permit be offset at a 1.3:1 ratio. In the present case, however, the anticipated impacts associated with the proposed project will be *de minimis*, and thus the Department's CZA Program does not require DSPC's offset proposal to meet this ratio.

With regard to DSPC's offset proposal, the Applicant has proposed a one-time donation to Kent County Conservancy of \$1,000 for the purpose of land conservation within the

designated Coastal Zone in Kent County. In determining a sufficient offset proposal, DSPC looked to other DNREC regulatory programs to quantify this donation in terms of air quality benefits.

First, market-based incentives exist for emission reductions of volatile organic compounds (VOCs) and nitrogen oxides (NOx). The Delaware Division of Small Business is currently offering VOC and NOx credits for sale at a rate of five tons for \$5,000. Applying this rate to estimated emissions from the proposed project, the annual value would be \$1.25. Therefore, \$1,000 could purchase emission reduction credits for 800 years of site operation.

DSPC also identified methodology from *The Ecosystem Service of Forests Improving Air Quality: A Literature Review* (Rice 2015) to quantify the estimated mean removal rate of sulfur dioxide, nitrogen dioxide, ozone, carbon monoxide, and particulate matter by forest areas. This review examined 33 studies to determine a range of pollutant removal rates for these five pollutants to establish the mean removal rate for each. In total, the review estimates that 11.645 g/m² of the pollutants are removed by forests annually. This equates to 103.9 lbs/acre annually.

Next, DSPC coordinated with the Delaware Department of Agriculture to determine the monetary value of an acre of forestland. The Forestland Preservation Program acquires properties as conservation easements at a discounted price determined by the property owners (with an average of a 66% discount). Based upon recent acquisition values of Kent County properties, the Department has calculated that a \$1,000 donation could purchase 0.28 acres of forestland.

If Kent Conservation District utilizes the \$1,000 donation for a conservation easement of 0.28 acres, this donation equates to approximately 29 lbs/acre of pollutant removal annually. Using this methodology, DSPC can demonstrably show the sufficiency of their offset proposal.

Based upon the Applicant's calculations and methodology as set forth in the Secretary's Assessment Report of October 25, 2019 (a copy of which is attached hereto as Appendix "A" and expressly incorporated herein as such), the \$1,000 donation for land conservation as proposed by DSPC satisfies the Department's offset standard.

The Department provided public notice of this CZA Application's submission, initially received by the Department on October 15, 2019, and the determination of an administratively complete application as set forth in the Secretary's Assessment Report, which was signed on October 25, 2019. Subsequently, the Department held a public hearing on November 19, 2019 at the DNREC office located at 89 Kings Highway, Dover, Delaware. One member of the public attended the hearing, however, they did not offer comment. Proper notice of the hearing was provided as required by law.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The public hearing record ("Record") consists of the following documents: (1) a verbatim transcript; (2) nine documents introduced by responsible Department staff at the public hearing held on November 19, 2019, and marked by this Hearing Officer accordingly as "Department Exhibits 1-9"; and (3) one document identified by Applicant representatives at the public hearing and marked accordingly as "Applicant Exhibit 1". The Department's person primarily responsible for reviewing this CZA Application, Erin Wilson, Environmental Scientist III, Division of Climate, Coastal, and Energy, developed the Record with the relevant documents in the Department's files.

Representing the Applicant at the hearing was Charles Denault, President of Delaware Storage and Pipeline Company. Following opening remarks from Ms. Wilson on behalf of the

Department (and the introduction of the Department's exhibits to be entered into the Record), Mr. Denault proceeded to offer a brief background of Delaware Storage and Pipeline Company's facility and proceeded with a brief description of proposed project. Finally, Mr. Denault concluded the Applicant's presentation with providing the Applicant's Exhibit #1 marked as a part of this Record. At the conclusion of the Applicant's presentation, the floor was then opened for the purpose of offering public comment on the Record regarding this proposed project. There was one member of the public in attendance at the hearing, however no public comment was received by the Department in this matter.

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

This Application is for a permit issued under the CZA. I find that the Applicant's facility is located within Delaware's "Coastal Zone". I also find that, while the Applicant's proposed project will result in *de minimis* increased air emissions, the Department has certified the proposed offset is more than sufficient, as required per Section 9.1.1 of the CZA Regulations. As its offset, the Applicant has proposed a one-time donation to Kent County Conservancy of \$1,000 for the purpose of land conservation within the designated Coastal Zone in Kent County. The Department believes that the offset the Applicant has acquired and placed in their permit application complies with the applicable regulations.

As stated previously, the solid waste generated by the Applicant's process will be collected, transported and disposed of at an appropriate facility. There will be no generation of hazardous waste. The proposed change in operation will not result in any changes in water use and water discharge to surface waters. As noted previously, the proposed construction is less than 5,000 square feet of impervious surface, and is not subject to regulatory requirements for

stormwater management. There will be no changes to supporting facilities and/or services required to support this proposed project, and the proposed plan will not increase or affect glare, heat, noise, vibration, radiation, electromagnetic interference or obnoxious odors.

There are no expected economic effects from the Applicant's proposed project, other than short term employment opportunities which will be created during the estimated eight (8) week construction of the project. The proposed project will not impact the shoreline, and migratory shorebirds, such as the red knot, are not known to nest on the project site. There are no expected effects to the aesthetics of the area or to neighboring land uses, no impact on wetlands, and no habitat for flora and fauna. Lastly, the Applicant has already been granted an approval from the Kent County Board of Adjustment (January 17, 2019) for a variance to enable a 5% expansion of a legal non-conforming fuel storage facility, per Department Exhibit # 2, attachment 5.

The Department is to evaluate a CZA application based upon a consideration of the CZA's balancing of economic and environmental factors. The CZA requires the Department to consider the following issues of any given proposed project: (1) environmental impacts; (2) economic impacts; (3) aesthetic impacts; (4) the number and type of supporting facilities required and their impacts on all other factors; (5) the impact on neighboring land uses; and (6) the county and municipal comprehensive plans. 7 *Del.C* §7004.

The Record developed in this matter indicates that the Department's experts have considered the above factors, and have recommended issuance of a permit to the Applicant in this matter. Further, the experts recommended that the Applicant's Coastal Zone permit application, as well as the proposed offset proposal, was sufficient.

Based on the Record developed, I find and conclude that the Applicant has adequately demonstrated its compliance with all requirements of Delaware's *Coastal Zone Act* and its CZA

Regulations, as noted herein, and that the record supports approval of DSPC's CZA permit application. In conclusion, I recommend that a Coastal Zone Permit consistent with the Record developed in this matter be issued by the Department in the customary form, and with appropriate conditions, to ensure continued improvement of environmental quality in the Coastal Zone of the State of Delaware.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has jurisdiction under its statutory authority 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 and lawful public notice of the CZA Application of Delaware Storage and Pipeline Company, and of the public hearing held on November 19, 2019 in a manner required by the law and regulations;
3. The permit applied for by Delaware Storage and Pipeline Company is for production/manufacturing activities which will take place within the defined Coastal Zone of Delaware, specifically, to construct a new storage building and undergo a process change to inject the aforementioned three jet fuel additives into the jet fuel supplied to Dover Air Force Base at its existing facility located at 987 Port Mahon Road, Little Creek, Delaware. Environmental impacts are anticipated, however, the one-time \$1,000 donation to Kent County Conservancy to offset such *de minimis* air emissions more than satisfies the Department's offset standard;
4. The Department has carefully considered the factors required to be weighed in issuing a CZA permit, and finds that the proposed project is acceptable for the Coastal Zone

at the proposed location, and that it should be permitted as set forth in Delaware Storage and Pipeline Company's Application;

5. The Department shall issue a permit to the Applicant, Delaware Storage and Pipeline Company, and said permit shall include all conditions consistent with the final Order and any other reasonable conditions that the Department includes in a CZA permit, to ensure that Delaware's environment will be protected from harm, consistent with the CZA and its regulations;
6. The Department has carefully considered all the statutory factors to be considered in making a decision on a CZA permit, and those required to be considered under the CZA regulations;
7. The issuance of the aforementioned CZA permit does not relieve Delaware Storage and Pipeline Company of the legal obligation of compliance with all building permits, subdivision, and other applicable code requirements of the county or municipality wherein the permitted project is located;
8. If there are deviations from the Applicant's proposed plan and operations previously approved by the Secretary, Delaware Storage and Pipeline Company shall notify the Secretary as soon as possible. If the Secretary receives information which he or she believes may alter the scope of the project, the Secretary may revoke the permit or require Delaware Storage and Pipeline Company, to submit a new application to reflect the altered nature of the project;
9. The aforementioned CZA permit will allow the Applicant to operate its business while reducing the overall environmental impacts to the Coastal Zone area, in furtherance of the purposes of 7 *Del. C.*, Ch. 70;

10. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and
11. The Department shall serve and publish its Order on all affected persons in a manner consistent with the service and publication of the Secretary's Order.

Theresa Newman

Theresa L. Newman
Public Hearing Officer

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Attachments/Appendices:

Appendix A: Secretary's Assessment Report, (10/25/2019)