DELAWARE
COASTAL ZONE ACT
PERMIT

NUMBER: 422

ISSUED TO: Praxair Distribution, Inc.

TO PERMIT: The construction and operation of a dry ice unit within the footprint of the permitted Praxair, Inc. carbon dioxide purification and liquefaction unit ("CO_2 unit") at the Delaware City Refinery.

SITE LOCATION: 4550 Wrangle Hill Road, Delaware City

Conditions Incorporated and Made Part of this Permit:

1. This permit is conditional upon the Permittee's compliance with all other applicable permit requirements, regulations and laws of the State of Delaware.

2. Issuance of this permit does not relieve the Permittee of the legal obligation of complying with all building permits, subdivision and other applicable code requirements of the county or municipality wherein the permitted project is located.

3. If there are significant deviations from the plan and operations approved by the Secretary, the Permittee shall notify the Secretary as soon as possible. This permit may be revoked and a new permit application required if the Secretary deems the deviation to substantially change the nature or scale of the project and to be of actual or probable harm to the purposes of the Coastal Zone Act.

Signature: David S. Small Date: 3/14/11e

David S. Small, Secretary
Department of Natural Resources & Environmental Control

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
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DOVER, DELAWARE 19901

OFFICE OF THE
SECRETARY

PHONE: (302) 739-9000
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Secretary's Order No. 2016-CZ-0012

Re: **Application of Praxair Distribution, Inc. for a Coastal Zone Act Permit for Manufacturing Dry Ice at 4550 Wrangle Hill Road, New Castle, New Castle County (CZA Project No. 422P)**

Date of Issuance: **March 14, 2016**

Effective Date: **March 14, 2016**

Pursuant to the *Coastal Zone Act* ("CZA"), *7 Del. C. Chap. 70* and other relevant authority, the Secretary of the Department of Natural Resources and Environmental Control ("Department") the Department enters the following findings of fact, reasons and conclusions as a Secretary's Order following a public hearing on Praxair Distribution, Inc.'s ("Applicant") CZA permit application ("Application").

Procedural History and Findings of Fact

On December 16, 2015, the Department's CZA Program received the Application. The Department properly provided public notice of the Application's filing, the determination that it was administratively complete, and that a March 8, 2016 public hearing would be held at the Department's Lukens Drive office in New Castle.

At the public hearing, the Department's presiding hearing officer, Robert P. Haynes, received public comments from two public speakers who supported the Application. The public comment period ended at the conclusion of the public hearing.

Following the public hearing, Mr. Haynes requested expert advice from the CZA Program, which provided a Technical Response Memorandum ("TRM"). The TRM recommends the issuance of a CZA permit that the CZA Program provided with the TRM.

In the attached Hearing Officer's Report ("Report"), Mr. Haynes sets forth the complete procedural history, the findings of fact, the conclusions and reasons based upon his recommendation to approve the Application. The Report includes the CZA Program's TRM as an attachment. The Report is adopted to the extent it is consistent with this Order.

The Application proposes to manufacture dry ice using an acre of land within the Coastal Zone[1] on land owned by the Delaware City Refining Company, LLC as part of its petroleum refinery at 4550 Wrangle Hill Road, New Castle, New Castle County ("Refinery"). The land also is on a parcel that will be used for the Applicant's affiliate, Praxair, Inc., for CO_2 manufacturing, as authorized by Secretary's Order No. 2015-CZ-0042 (September 15, 2015).

The Department finds that the proposed dry ice manufacturing would be "the mechanical or chemical transformation of organic or inorganic substances into new products." *7 Del. C. §7001.* The Department finds that the Project would not entail any bulk product transfer or be a "heavy industry use" given its use of less than 20 acres of land and its manufacturing characteristics are not similar to the CZA's definition of "heavy industry use." Moreover, the Project will have no negative impacts on the Coastal Zone, as discussed below.

[1] The Applicant would use land on New Castle County tax parcel 12-008.00-014.

The Project's manufacturing process would use liquid carbon dioxide supplied by the adjoining Praxair, Inc. CO_2 Plant, and which would be stored in a horizontal above grade storage tank. A building will be constructed to house the manufacturing equipment, which converts the liquid CO_2 into dry ice snow that is formed into either blocks, nuggets or pellets. The proposed maximum production capacity will be 156 tons of dry ice per day. The dry ice would be shipped in insulated containers for sale by PDI through its distribution network.

The Secretary's Assessment found that there would not be any air discharges or any other negative impacts in the Coastal Zone. The Report found that nothing in the Record supported any change to the Secretary's Assessment's determination of no negative impacts. Indeed, as noted by one public comment, the lack of any negative impacts in a CZA permit proceeding is very rare and attests to the approval of the Application.

In sum, the Record supports approval of the Project because it satisfies the requirements of the CZA and the CZA Regulations. Consequently, the Project should receive the CZA permit that the CZA Program drafted.

Conclusions and Reasons

The Department concludes that the Applicant has met its regulatory burden to support its Application. The CZA Program's experts reviewed the Application and the Record and recommended that the Department approve the Project, and that the Department issue the CZA permit that the CZA Program drafted. The presiding Hearing Officer also reviewed the Application and the Record, and his Report similarly recommends approving the Project and the Department's issuance of the CZA permit, as prepared by the CZA Program. There was no public comment opposed to the Project. The Project also will provide economic benefits to Delaware through 36 temporary construction jobs and 7 ongoing jobs once the dry ice manufacturing begins. The State of Delaware will also receive approximately $150,000 additional annual tax revenue. Thus, the Department enters the following conclusions:

1. The Department has jurisdiction and authority to issue a CZA Permit to the Applicant;

2. The Department provided public notice in a manner required by the law and its regulations of the receipt of the Application, and the determination that the Application was complete and that a March 8, 2016 public hearing would be held to receive public comments on the Application;

3. The Department held a public hearing in a manner required by the CZA and its regulations;

4. The Department considered all timely and relevant public comments in making its determination, which included public comments in support of the Application;

5. The Department carefully has considered all the factors to be considered in making a decision on a CZA permit application under the CZA and the CZA Regulations based upon the Record established in the Report; and

6. 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's CZA Regulations, and shall publish the Order on the Department's web site.

David S. Small
Secretary

HEARING OFFICER'S REPORT

TO: The Honorable David S. Small
Secretary, Department of Natural Resources and Environmental Control

FROM: Robert P. Haynes, Esquire
Senior Hearing Officer, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: Application of Praxair Distribution, Inc. for a Coastal Zone Act Permit to Manufacture Dry Ice at 4550 Wrangle Hill Road, New Castle, New Castle County (CZA Project No. 422P)

DATE: March 11, 2016

I. PROCEDURAL HISTORY

This Report considers the Record established for the Secretary of the Department of Natural Resources and Environmental Control ("Department") to decide whether to approve Praxair Distribution, Inc.'s ("Applicant" or "PDI") Coastal Zone Act[1] ("CZA") permit application ("Application").

On December 16, 2015, the Department's Coastal Zone Act Program ("CZA Program") received PDI's Application.

On December 23, 2015, the CZA Program had published public notices of the Application in *The News Journal* and the *New Castle Weekly*.

On February 5, 2016, Secretary David S. Small signed the Secretary's Environmental Assessment, which determined that the Application was administratively complete.

The CZA Program had published public notices in *The News Journal* on February 14, 2016, and in the *New Castle Weekly* on February 17, 2016 that announced that the Application was administratively complete, and that the Department would hold a March 8, 2016 public hearing at the Department's offices at 391 Lukens Drive, New Castle, New Castle County.

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[1] *7 Del. C. Chap. 70.*

I presided over the public hearing, which was attended by CZA Program representative Kevin Coyle, AICP CEP, Principle Planner, and PDI's representatives, Mark Lange, Stephen Chun, and David Copeland and its consultants, Jeff Bross and Carrie DiSimone of Duffield Associates. In addition, several others associated with the building trades attended the public hearing, as shown on the public hearing's sign in sheet marked as DNREC Ex. 7. The public comment period closed at the conclusion of the public hearing.

Following the public hearing, I requested the Department's experts in the CZA Program for their technical advice and recommendation. The CZA Program provided the attached Technical Response Memorandum ("TRM") and draft permit. The CZA Program recommended that the CZA permit, as drafted by the CZA Program, be issued.

This Report recommends that the Department issue the CZA Program's draft permit based upon the Record established below, particularly the CZA Program's expert advice and recommendation.

II. SUMMARY OF THE RECORD[2]

This Report is based upon the following Record: 1) the documents introduced as exhibits at the public hearing and identified below, 2) the verbatim transcript of the public hearing, and 3) the information in this Report and the documents and information identified herein.

At the public hearing, Mr. Coyle submitted the following documents[3] from the Department's files, which were marked as exhibits:

DNREC Exhibit 1-Application for a Coastal Zone Act Permit;

DNREC Exhibit 2-Affidavit of Publication announcing the receipt and availability of the Coastal Zone Act Permit application published in *The News Journal* on December 23, 2015;

[2] This summary merely summarizes the Record and does not establish facts.

[3] The Department provides documents for the record at the public hearing solely to assist the public in making public comments. The Department does not have a burden of proof to develop a record during the public hearing.

DNREC Exhibit 3-Affidavit of Publication announcing the receipt and availability of the Coastal Zone Act Permit application, published in the *New Castle Weekly*, December 23, 2015;

DNREC Exhibit 4- Secretary's Environmental Assessment Report, signed February 5, 2016;

DNREC Exhibit 5- Affidavit of April 14, 2016 publication in *The News Journal* of the public notice of an administratively completed Application and that a public hearing would be held March 8, 2016; and

DNREC Exhibit 6- Affidavit of Publication April 17, 2016 in the *New Castle Weekly* of the public notice of a completed Application and that a public hearing would be held March 8, 2016.

Following Mr. Coyle's presentation, the Applicant's David Copeland, made a slide presentation. Applicant Ex. 1. He described the Applicant's parent corporation, Praxair, Inc., which he said is a Fortune 250 industrial company that produces atmospheric gases, process gases, specialty gases, and surface technology and in 2015 had global sales of $10.8 billion and employed 27,000 persons in fifty countries. He stated that Praxair, Inc. has been on the Dow Jones Sustainability Index for the past thirteen years, which is longer than any other chemical company.

He identified the Applicant's as a wholly owned subsidiary of Praxair, Inc. with separate management team and business strategy. PDI has 4,100 employees and has 470 stores, warehouses and distribution centers that serve 280,000 customers. PDI distributes welding and cutting products, specialty and medical gas cylinders, small cryogenic containers, beverage carbonation, and dry ice. Mr. Copeland said that PDI has thirteen dry ice production facilities in the United States and Canada, and provided a map showing the many distribution locations. He described the dry ice manufacturing process, which would use 2.3 pounds of CO_2 to produce 1.0 pound of dry ice. The Applicant sells dry ice over the counter to consumers and to customers such as airlines caterers, blast cleaners, shippers, and other users who need to keep material cold.

Mr. Copeland noted that the manufacturing would use less than an acre of the 3.44 acre site the Department approved for Praxair's CO_2 Plant, which is on land owned by Delaware City Refining Company, LLC as part of its refinery complex.

Mr. Copeland stated that the Project would have no negative impact and recited the lack of air emissions. He also provided the Project's water usage and wastewater discharges, which would be for the employees and power washing storage containers. He said that there would be no impact to the other CZA environmental considerations such as wetlands, flora, and fauna, and there would be no glare, heat, noise, radiation, electromagnetic interference, or obnoxious odors. He said that no new supporting facilities would be required other than the CO_2 Plant.

He estimated that the Project would provide 36 construction jobs and 7 permanent jobs and would provide Delaware annually with $150,000 in state tax revenue. The Applicant's slide presentation is included in the Record as Applicant Ex. 1.

The first member of the public to speak was Bill Stout, Vice-President of Atlantic Constructors, which Applicant retained to be the Project's construction manager. He spoke in support of the Project. He said that the Applicant was very concerned with safety as was his company, which was building the CO_2 Plant now without any injuries.

The second public speaker was Martin Willis, who supported the Application. He stated that based upon his experience as a frequent attendee of CZA hearings. He commented that this CZA application was unlike any he had seen before because it did not have any negative impacts.

I requested assistance from the Department's CZA experts, who provided the attached TRM that recommends issuance of a draft permit that the CZA Program prepared should the Secretary decide to issue a CZA permit.

III. FINDINGS OF FACT AND REASONS

A review of the Record finds that it supports the issuance of a CZA permit for the Project based upon the Application, the CZA Program's recommendation and the CZA Program's draft permit. The Application provided the Department with all the information required by the CZA Regulations, including applying the appropriate analysis of the Project's environmental impacts. The Department already accepted the Application in the Secretary's Environmental Assessment, and there was nothing in the Record from the public hearing that supports any change to the Secretary's Environmental Assessment.

The Application supports finding that the proposed dry ice manufacturing would be new manufacturing within the Coastal Zone. The Application also supports finding that the proposed manufacturing is subject to the CZA permit process because of the mechanical transformation of CO_2 into dry ice products.

The land use is compatible with New Castle County's "heavy industrial" zoning, and is owned by the Delaware City Refinery Company, LLC. as part of the land for the petroleum manufacturing. The proposed manufacturing would be consistent with the Department's recent CZA permit approval of the land's use for CO_2 manufacturing by PDI's affiliate, Praxair, Inc.

The manufacturing would require the construction of a 7,357 square foot Dry Ice Building, a covered 60' by 10 ' Recovery Skid, and a 7,500 gallon above ground liquid carbon dioxide storage tank. The daily production capacity will be 156 tons of dry ice and would not result in any air emissions. The manufacturing would be within the petroleum refining complex, and hence would not result in any material change in the land use or appearance.

The proposed manufacturing would use the liquid CO_2 produced adjunct to the proposed dry ice unit, and would be stored in an above ground tank. The CO_2 would be manufactured into

snow and formed into either blocks, nuggets or pellets for sale to consumers. As noted by Mr. Copeland, the dry ice would be sold over the counter and to such customers as airline caterers and shippers.

Based upon the Project's proposed manufacturing, I find that it is allowed under the CZA because it is not a prohibited use, which is either a "heavy industry use" or a use that is a "bulk products transfer." The Project's use of approximately three acres is well less than the twenty acres the CZA describes as a characteristic of a "heavy industry use." The Project also will not have most of the other heavy industry characteristics identified in the CZA, which include "smokestacks, tanks, distillation or reaction columns, chemical processing equipment, scrubbing towers, pickling equipment and waste treatment lagoons."

The CZA requires consideration of the Project's environmental impact. The Project's environmental impact entails numerous considerations and these were reviewed in the Secretary's Environmental Assessment Report, which found that the Project would have no negative impact on the Coastal Zone's environment. Nothing in the Record developed since the Environmental Assessment warrants changing this determination. There were no public comments submitted in opposition and I agree with the Environmental Assessment that there are no negative impacts. This finding means that the Applicant does not have to provide an environmental offset to the negative impact.

The Project's impact on the CZA's water supply supports finding that the Project will not harm the Coastal Zone's water supply because the usage for the workers domestic use and power washing of containers would be provided by a public water utility that does not use supply from the Coastal Zone. Hence, the Project would not have an impact on the Coastal Zone's water supply.

The Project's impact of the Coastal Zone's water quality from wastewater discharges also supports finding that the peak wastewater flow from the workers use for sanitary sewer will not adversely impact the Refinery's wastewater treatment plant's ability to treat the Project's wastewater discharges.

The Project also will not impact the stormwater management, which will benefit from the improved stormwater management approved for Praxair's CO_2 Plant.

The Record shows that the small amount of waste materials produced by the Project will be disposed of at appropriate facilities/locations.

The Record shows that the Project poses no threat to any natural habitat or any wildlife or fisheries.

The two public comments at the public hearing were all in favor of the Project. The Department's CZA experts reviewed the Record and have recommended approval of the CZA permit that they prepared.

The CZA's second consideration after considering the above environmental impacts is the Project's proposed economic effect, which will provide 36 temporary construction jobs over its one year construction period and 7 fulltime jobs when the Dry Ice Plant begins operation. The Project will provide the State of Delaware with approximately $150,000 ongoing increase in state tax revenue. I find the positive economic benefit justifies a CZA permit as consistent with the CZA's purposes, which recognizes the economic benefit from new manufacturing in the Coastal Zone subject to the CZA environmental safeguards, as determined by the Department in the permit process.

The third CZA consideration is aesthetics. The Project will be part of the existing Facility so there will be no real change in the appearance. Thus, the Project satisfies this CZA consideration.

The fourth CZA consideration is the number and type of supporting facilities required and their impacts on all other factors. The Project will require no support facilities.

The fifth consideration is the effects on neighboring land uses, and the Applicant states that there would be no adverse impacts on the closest residential property. I agree based upon the overall distances and lack of any change of appearance from the existing Refinery's operations.

The sixth consideration is that Project will be consistent with county and municipal comprehensive plans, which Applicant satisfied by providing proof of New Castle County's approval of the Project's use consistent with local planning regulation.

Therefore, I find that the Department should issue the Applicant the CZA permit because the Project will allow a permitted manufacturing use with no negative environmental impact. The location of the Dry Ice Plant adjacent to the approved CO_2 Plant also avoids an issue with the transportation of the CO_2 to locations where it may be used, which means that the Dry Ice Plant should reduce truck air emissions that otherwise would be required to transport the CO_2 to other locations. Thus, I find that a CZA permit should be issued, subject to the reasonable permit conditions included in the CZA Program's draft permit, to ensure that the permit is consistent with the CZA, and the Department's regulations and policies.

IV. CONCLUSIONS

I find and conclude that the Record supports approval of the Application and the issuance of the CZA permit that the CZA Program prepared. I recommend that the Secretary adopt the following concluding paragraphs:

1. The Department has jurisdiction and authority to issue a CZA Permit to the Applicant;

2. The Department provided public notice in a manner required by the law and its regulations of the receipt of the Application, and the determination that the Application was

complete and that a March 8, 2016 public hearing would be held to receive public comments on the Application;

3. The Department held a public hearing in a manner required by the CZA and its regulations;

4. The Department considered all timely and relevant public comments in making its determination, which included public comments in support of the Application;

5. The Department carefully has considered all the factors to be considered in making a decision on a CZA permit application under the CZA and the CZA Regulations based upon the Record established in the Report; and

6. The Department shall publish legal notice of 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's CZA Regulations, and shall publish the Order on the Department's web site.

Robert P. Haynes, Esquire
Senior Hearing Officer

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MEMORANDUM

TO: David S. Small, Secretary

THRU: Philip J. Cherry, Director

FROM: Kevin F. Coyle, AICP CEP, Principal Planner KFC

DATE: March 11, 2016

SUBJECT: Praxair Distribution, Inc. CZA Permit Application

The Coastal Zone Act Program has reviewed the file and the public comments submitted regarding the CZA Permit Application from Praxair Distribution, Inc. The Program has no further comments or concerns. We recommend that the CZA Permit be issued.