

**Delaware Coastal Zone Conversion Permit Act  
Regulatory Advisory Committee**

**Final Report and Recommendations  
to the  
Secretary of the Delaware Department of Natural Resources and Environmental  
Control**

**17 April 2019**

## TABLE OF CONTENTS

<b>1. EXECUTIVE SUMMARY.....</b>	<b>3</b>
SUMMARY OF THE CZCPA RAC’S FINAL RECOMMENDATIONS.....	4
<b>2. BACKGROUND ON THE COASTAL ZONE ACT AND ITS CURRENT REGULATIONS AND THE COASTAL ZONE CONVERSION PERMIT ACT.....</b>	<b>9</b>
<b>3. BRIEF SITE DESCRIPTIONS OF THE 14 HEAVY INDUSTRY USE SITES .....</b>	<b>10</b>
<b>4. ORIGINS AND DESCRIPTION OF THE RAC .....</b>	<b>13</b>
<b>5. SUMMARY OF WORK GROUPS .....</b>	<b>14</b>
<b>6. SUMMARY OF PUBLIC ENGAGEMENT.....</b>	<b>15</b>
<b>7. FINAL RAC RECOMMENDATIONS.....</b>	<b>16</b>
A. BULK PRODUCT TRANSFER FACILITIES .....	16
B. PLANS FOR POTENTIAL IMPACTS OF SEA LEVEL RISE AND COASTAL STORMS .....	17
C. ECONOMIC EFFECT .....	18
D. ENVIRONMENTAL IMPACT .....	21
E. OFFSETS .....	22
F. FINANCIAL ASSURANCE .....	24
G. CROSS-CUTTING ISSUES.....	29
<b>8. APPENDICES (ELECTRONICALLY AVAILABLE) .....</b>	<b>32</b>
APPENDIX A: STATUTES AND EXISTING REGULATIONS .....	32
APPENDIX B: HEAVY INDUSTRY USE SITE MAPS AND DESCRIPTIONS.....	32
APPENDIX C: CZCPA PROCESS RECOMMENDATIONS REPORT.....	32
APPENDIX D: PROCEDURES FOR RAC OPERATIONS.....	32
APPENDIX E: CZCPA RAC MEMBERSHIP LIST .....	33
APPENDIX F: RAC MEETING AGENDAS .....	34
APPENDIX G: RAC MEETING SUMMARIES .....	34
APPENDIX H: WORK GROUP MEMBERSHIP LISTS, MEETING SUMMARIES, AND PRODUCTS .....	34
APPENDIX I: PUBLIC OPEN HOUSES DOCUMENTS AND PUBLIC FEEDBACK SUMMARY .....	37
APPENDIX J: OTHER KEY DOCUMENTS .....	38

## 1. EXECUTIVE SUMMARY

Delaware's Coastal Zone Act (CZA) was passed in 1971 and prohibited "heavy industry uses of any kind not in operation on June 28, 1971" within the Coastal Zone. The Secretary of the Department of Natural Resources and Environmental Control (DNREC) and the Coastal Zone Industrial Control Board (CZICB) were given authority to implement the Act and promulgate regulations. The Act required a Coastal Zone Permit for any new or expanded manufacturing activity that would have an impact on the environment, the economy, the aesthetics of the surrounding area, and/or neighboring land uses. The fourteen (14) large heavy industry use sites in operation at the time of the CZA's passage were allowed to continue operations. The geographic footprints of these 14 operations are referred to, statutorily, as "heavy industry sites" and, colloquially, as the "grandfathered sites". At that time, the Act further prohibited the expansion of these existing non-conforming heavy industry uses beyond their original physical footprints.

In 2017, during the 149th General Assembly, the Delaware legislature passed Chapter 120 (Formerly House Bill No. 190): An Act to Amend Title 7 of the Delaware Code Relating to the Coastal Zone Act. This Act, also known as the Coastal Zone Conversion Permit Act (CZCPA), continued to prohibit new industrial activity outside of the 14 heavy industry use sites. However, it allowed for redevelopment of these 14 sites under certain conditions, including the requirement to obtain a Coastal Zone Conversion Permit.

Under the CZCPA, DNREC was required to develop regulations for Conversion Permits by October 1, 2019. DNREC decided, in order to be responsive to the statute and the diversity of interests around the Coastal Zone, to convene a regulatory advisory committee (RAC) to develop, by consensus to the greatest degree possible, the conceptual framework and approach to these new regulations. This same process was successfully used in the 1990s to create the framework for the then first and new CZA regulations. To ensure an effective and efficient process, DNREC appointed a RAC Chair and retained the services of facilitator, Patrick Field, from the Consensus Building Institute. The RAC Chair was Justice Randy J. Holland, who served on the Delaware Supreme Court for over 30 years and retired in March 2017.

Given strong public interest in the passage of the CZCPA and the development of new regulations, DNREC and the RAC engaged the public in a number of ways in addition to the RAC itself. A brief summary of these activities is included below. A summary of specific public comments received on the RAC's preliminary recommendations are included in the Recommendations section in the body of this report. The activities were:

- **Public Workshops** – DNREC held two public workshops in November 2017, involving some 80 attendees, to obtain feedback on the statutory changes to the CZA and the convening process for the Regulatory Advisory Committee
- **Fenceline Community Meetings** – DNREC staff engaged with various neighborhood groups and associations during the early work of the RAC. The goal of such engagement was to help fenceline communities, which are communities near or adjacent to a heavy industry use site, to understand the regulatory development process and inform them of ways to provide input
- **Open Houses** – The RAC and DNREC held three Open Houses in late February 2019 to obtain feedback from the public on the RAC's preliminary recommendations. The Open Houses were

held in Claymont, Delaware City, and Wilmington on different nights. The Open Houses included an overview presentation of the legislative changes and the RAC process in video form, as well as information stations, staffed by DNREC employees, on the RAC's preliminary recommendations. During and after the Open Houses, the public was offered the opportunity to provide focused, written feedback on the RAC's preliminary recommendations, with the purpose of informing future RAC discussions and final recommendations

- **RAC Meetings** – All RAC meetings were publicly noticed, open to the public and included a time for public comment
- **Work Group Meetings** – All Work Group meetings were publicly noticed and open to the public
- **Website** – The RAC's publicly available website served as a repository of information relating to the RAC and the CZA, including background information, meeting materials, public comment information, and information about the stakeholder engagement process.
- **Public Comment Process** – Public comments were welcomed throughout the RAC process, including during the RAC meetings, at the three public Open Houses, and via a written form available online.

## SUMMARY OF THE CZCPA RAC'S FINAL RECOMMENDATIONS

Per the DNREC Secretary's direction, the CZCPA RAC was the official body charged with providing recommendations to DNREC on the regulatory approach and content of new CZA regulations that will govern Conversion Permits. The RAC developed recommendations on several key topics. These topics included:

- Bulk Product Transfer Facilities
- Plans for Potential Impacts of Sea Level Rise and Coastal Storms
- Economic Effect
- Environmental Impact
- Offsets
- Financial Assurance
- Cross-Cutting Issues

Below is a table that provides a brief background on each topic and a summary of the RAC's final recommendations.

	Background	Summary of the CZCPA RAC's Final Recommendations
Bulk Product Transfer Facilities	A bulk product transfer facility is any port or dock facility that is used to transfer bulk quantities of any substance between ships or between a ship and an onshore facility. The CZA allows for bulk product transfer facilities to operate on heavy industry use sites under certain conditions.	<ul style="list-style-type: none"> <li>Record keeping conditions should apply (e.g., quantity of bulk products transfer, final destination of products, dates of product exports)</li> <li>Conversion Permits should be granted for "bulk product categories" to minimize the need for permit modifications or new permits for minor or related changes. Additions of a new bulk product category may require a permit modification or a new permit</li> </ul>
Plans for Potential Impacts of Sea Level Rise and Coastal Storms	Recent projections by Delaware's Sea Level Technical Advisory Committee indicate that sea levels are continuing to rise, as a result of global climate change. By 2050, sea levels could rise between 0.7 and 1.9 feet in the state. Sea level rise, coupled with coastal storms, is increasing the risk of flood damage to shorelines, infrastructure, and structures in coastal areas statewide. The CZA requires Conversion Permit applicants to prepare a site plan that accounts for potential impacts of sea level rise and coastal storms over the anticipated life of the facility and related infrastructure.	<ul style="list-style-type: none"> <li>Plans should detail risk, likely impacts, and mitigation measures for specific geographic areas of a site</li> <li>Plans should address potential negative impacts to adjacent parcels from development and flood mitigation activities</li> <li>Plans should address hazards over the anticipated useful life of the facility, specifically related to flooding, shoreline erosion, and wind</li> <li>Plans should address measures necessary to evacuate, suspend operation(s), and secure the facility, when necessary, due to significant coastal storm events</li> <li>When Plans are updated, they should be posted publicly and subject to written public comment</li> </ul>
Economic Effect	Economic effect is the economic benefit a development project brings to Delaware. Economic effect has three components: direct effect, indirect effect, and induced effect. The CZA states that economic effect must account for jobs created, income generated by the wages or salaries of new jobs (in relation to the land required for development), and potential tax revenues accrued to state and local government.	<ul style="list-style-type: none"> <li>Economic effect and net economic improvement metrics should address the most recent heavy industry use or the current use (if not a heavy industry use) on a heavy industry use site</li> <li>The State of Delaware should prepare a "baseline report" to ensure a commonly understood baseline for economic effect across the 14 heavy industry use sites</li> <li>Conversion Permit regulations should require that Permit applicants submit economic metrics on project cost, tax revenue, employment, state-and-community-level effect, and other costs to the state when reporting on economic effect and net economic improvement</li> <li>The DNREC Secretary should consider potential negative economic effect from the activity or facility set forth in the Conversion Permit</li> <li>DNREC should verify all economic information submitted by Conversion Permit applicants</li> <li>The CZCPA RAC emphasizes the CZCPA's intent and goal of local and robust hiring</li> </ul>

<p>Environmental Impact</p>	<p>Environmental impacts are caused by the construction or operation of an industrial facility or infrastructure project, or the release of a substance into (or a disturbance to) the environment. Environmental impacts may affect air, water, land, or living organisms, starting from where the impact originates. Impacts can be positive, negative, or neutral. The CZA provides a detailed list of environmental impacts that must be addressed by applicants for a Coastal Zone Permit or a Conversion Permit.</p>	<ul style="list-style-type: none"> <li>• DNREC should prepare a “baseline report” to ensure a commonly understood baseline on the current uses and existing environmental conditions, impacts, and risks across the 14 heavy industry use sites</li> <li>• Environmental impacts should be characterized in the same way they are currently characterized in the current CZA permit program</li> <li>• Environmental impacts should continue to encompass direct and cumulative impacts</li> </ul>
<p>Offsets</p>	<p>Offsets are actions used to counteract negative environmental impacts. The CZA requires Conversion Permit applicants to carry out offset “projects” that “more than offset” the negative environmental impacts caused by their proposed development “on an annual basis.” Offsets are most effective when the project counteracts the impacts as closely as possible in type, location, timing, and affected community. Offsets are intended to be undertaken only after all reasonable steps have been taken to avoid the negative impact in the first place.</p>	<ul style="list-style-type: none"> <li>• Offsets should match, as closely as possible, the location, medium, duration, timing, and pollutant of the environmental impact</li> <li>• The CZCPA RAC put forth a sequential process for a Conversion Permit applicant to determine an appropriate offset project</li> <li>• Minimizing environmental impacts should remain a priority, as the offset process is only intended to address environmental impacts that cannot be avoided or further minimized</li> <li>• The CZCPA RAC affirms the DNREC Secretary’s authority to reject Conversion Permit applications with environmental impacts deemed too severe, even with an offset proposal</li> </ul>
<p>Financial Assurance</p>	<p>Financial Assurance is a way for an owner or operator of an industrial site to guarantee that a certain amount of money will be available to address environmental contamination on the site. Financial assurance comes into play when the owner or operator of the site is unable or unwilling to address the contamination. When this happens, the environmental regulator is able to access the money guaranteed by the financial assurance to address the contamination.</p> <p>The CZA requires Conversion Permit applicants to provide financial assurance for three scenarios:</p>	<ul style="list-style-type: none"> <li>• The CZCPA RAC recommends financial assurance for a fourth scenario: Maintenance or repair of the project site or infrastructure improvements to address sea level rise or coastal storms</li> <li>• The CZCPA RAC put forth a table of information that details: (1) event categories of expected financial risk due to Conversion Permit activity; (2) the process used in establishing financial assurance for each risk event; (3) the way to determine the amount of financial assurance necessary to meet the requirements of the CZA; (4) the range of financial assurance instruments potentially applicable to Conversion Permit activity; (5) each instrument’s ability to both adapt to the time horizon of a risk event and to ensure funds are available in the time and amount necessary</li> <li>• Financial assurance should be commensurate with the use (and associated risks) proposed by the Conversion Permit applicant and reviewed at appropriate periodic intervals for the life of the permit</li> </ul>

	<ul style="list-style-type: none"> <li>• Contamination on the project site at the time of application</li> <li>• Termination, liquidation, or abandonment of heavy industry or bulk product transfer activities on the project site</li> <li>• Future incidents that result in environmental contamination on the project site</li> </ul>	<ul style="list-style-type: none"> <li>• The DNREC Secretary should clarify the definition of “environmental damage,” as used in the CZA</li> <li>• Self-insurance instruments should not be preferred for providing financial assurance to minimize environmental damage, and stabilize and secure the site upon termination, abandonment, or liquidation of site activities, due to the potentially “far into the future” timescale of such an event</li> <li>• The CZCPA RAC encourages the DNREC Secretary, upon periodic financial assurance review, to ensure s/he has the authority to require those utilizing self-insurance-only instruments to move towards third-party-only instruments or a blend of self-insurance and third-party instruments</li> </ul>
<p>Cross-Cutting Issues</p>	<p>There are a number of issues that are relevant to the other six topic areas. These “Cross-Cutting Issues” include:</p> <ul style="list-style-type: none"> <li>• <b>Definition of “Project Site,”</b> which determines the physical boundaries of the project subject to a Conversion Permit</li> <li>• <b>Definition of “Useful Life,”</b> which may affect such issues as plans for potential impacts of sea level rise and coastal storms, as well as financial assurance</li> <li>• <b>Permit Duration, Modification, Renewal, and Revocation,</b> given the scale, complexity, and potential impacts of Conversion Permits, these may require a permit term (unlike existing Coastal Zone Permits, which are granted once with no duration)</li> <li>• <b>Permit Monitoring and Reporting Post-Approval,</b> again, given the complex nature of the Conversion Permits</li> </ul>	<ul style="list-style-type: none"> <li>• <b>“Useful life”</b> should equal thirty (30) years unless the Secretary allows otherwise</li> <li>• <b>Conversion Permit duration</b> (both for the initial permit and any renewed permit) should be twenty (20) years</li> <li>• <b>Conversion Permit monitoring and reporting post-approval:</b> <ul style="list-style-type: none"> <li>○ For Site Plans for Sea Level Rise and Coastal Storm Impacts: Plan updates should occur at least every ten (10) years</li> <li>○ For Offsets: Applicant should provide a monitoring schedule that describes a process for third-party verification of an offset project’s operation and completion</li> <li>○ For Financial Assurance: A Conversion Permittee should annually, within ten (10) days of the anniversary date of issuance of its permit, submit to DNREC evidence that the financial assurance required by the permit is in effect in the amount required by the permit</li> <li>○ For Bulk Product Transfer: The permittee should submit an annual report</li> <li>○ For Site Inspections: DNREC should have access to the site at reasonable times and on a regular basis, with reasonable times generally meaning operating hours</li> </ul> </li> <li>• <b>Conversion Permit revocation:</b> The Secretary may revoke a permit for significant or repeated violations</li> <li>• <b>Conversion Permit modifications:</b> Modifications to an existing permit should be allowed. If the Secretary grants a request for a modification, only the conditions subject to modification are reopened. Modifications would be classified as either minor (e.g., administrative changes) or major (e.g., changes that affect substantive requirements of the Conversion Permit)</li> </ul>

- |  |  |  |
|--|--|--|
|  |  | <ul style="list-style-type: none"><li>• <b>Conversion Permit renewal</b> should be allowed. The application for permit renewal should be submitted no fewer than 180 days prior to expiration. The renewal process should be streamlined, as compared to the original application, and focused on environmental impacts and offsets, financial assurance, and sea level rise and coastal storm planning and should take into account the applicant’s compliance record.</li><li>• <b>“Project Site”</b> means the physical location at which a permitted facility operates or the location where a proposed project, that is the subject of a Conversion Permit application, will operate. A project site may comprise an entire tax parcel, or parcels, or part(s) of any tax parcel(s); however, its preliminary boundary shall be defined prior to the issuance of a permit in the application for a permit, and its final boundary, after a permit is granted by the Secretary, shall be defined in the permit.<ul style="list-style-type: none"><li>○ <b>NOTE:</b> <i>One member objected to this definition of Project Site because they are concerned that heavy industry use sites will be subdivided, leading to multiple permittees, numerous smaller uses, greater risks across the site as a whole, high monitoring costs to DNREC, and the potential of “high grading” the site so some portions are left contaminated and not remediated nor restored to industrial use.</i></li></ul></li></ul> |
|--|--|--|

## 2. BACKGROUND ON THE COASTAL ZONE ACT AND ITS CURRENT REGULATIONS AND THE COASTAL ZONE CONVERSION PERMIT ACT

Delaware's Coastal Zone Act (CZA) was passed in 1971 and prohibited "heavy industry uses of any kind not in operation on June 28, 1971" within the Coastal Zone. The CZA also preceded the passage of federal environmental legislation such as the Clean Water Act (CWA) (1972), significant amendments to the Clean Air Act (CAA) (passed in 1970 and amended in 1977 and 1990), the Resource Conservation and Recovery Act (RCRA) (passed in 1977), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (passed in 1980).

The Secretary of the Department of Natural Resources and Environmental Control (DNREC) and the Coastal Zone Industrial Control Board (CZICB) were given authority to implement the Act and promulgate regulations to carry out the requirements contained within the Act. The Act required a Coastal Zone Permit for any new or expanded manufacturing activity that would have an impact on the environment, the economy, the aesthetics of the surrounding area, and/or neighboring land uses. The fourteen (14) heavy industry use sites in operation at the time of the CZA's passage were allowed to continue operations. The geographic footprints of these 14 operations are referred to, statutorily, as "heavy industry sites" and, colloquially, as the "grandfathered sites". The Act further prohibited the expansion of these existing, nonconforming, heavy industry uses beyond their original physical footprints.

In 1999, regulations under the CZA were promulgated to provide clarity and consistency in the applications for and review of Coastal Zone Permits. These regulations were informed by the recommendations of a multi-stakeholder regulatory advisory committee. Under the CZA, an applicant must request a Coastal Zone Permit in writing and it must include:

- (1) Evidence of approval by county or municipal zoning authorities
- (2) Detailed description of the proposed construction and operation of the use
- (3) An Environmental Impact Statement (EIS)
- (4) Such further information requested by the Secretary

As required by the regulations, and codified in the CZCPA for Conversion Permits, the applicant must propose an environmental "offset" to more than offset the environmental impact of the proposed use. Under the original CZA, manufacturing uses and "expansion or extension of nonconforming uses" within the original heavy industry use site footprints were allowed by permit only, while new heavy industry uses, or bulk product transfer facilities were prohibited. A number of other uses, as outlined in the regulations, such as commercial or residential activities, are not regulated under the CZA.

In 2017, during the 149th General Assembly, the Delaware legislature passed Chapter 120 (Formerly House Bill No. 190): An Act to Amend Title 7 of the Delaware Code Relating to the Coastal Zone Act. This Act, also known as the Coastal Zone Conversion Permit Act (CZCPA), continued to prohibit new industrial activity outside of the 14 heavy industry use sites. However, an additional or alternative heavy industry use can now be permitted on a heavy industry use site, under certain conditions. Some heavy industry uses remain prohibited, including liquefied natural gas terminals, oil refineries, basic cellulosic paper mills, basic steel manufacturing plants, and incinerators. Under certain circumstances, the Act also now allows a heavy industry use site to operate as a bulk product transfer facility for loose materials fully produced or fully utilized by one or more facility within the Coastal Zone.

### 3. BRIEF SITE DESCRIPTIONS OF THE 14 HEAVY INDUSTRY USE SITES

The following provides a brief summary of the 14 heavy industry sites that are subject to the Coastal Zone Conversion Permit Act (CZCPA). See *Appendix B: Heavy Industry Use Site Maps and Descriptions* for more detailed information.

Site Name in 1999	Other Names for the Site	Pre-1971 Heavy Industry Use	Current Use	Status of Remediation	Site Address	Acres Within Footprint
<b>Chloramone</b>	Kuehne Chemical Company	Chemical Processing Plant (Chlorine Production)	Manufactures chlorine used primarily for water treatment.	Site not currently under any active remediation.	1645 River Road, New Castle	5.1
<b>Citi Steel</b>	Claymont Properties LLC, Evraz Steel	Steel Plant	Not currently in active use.	Active remediation under the state's HSCA Voluntary Cleanup Program	4001 Philadelphia Pike, Claymont	165.2
<b>Delaware Storage and Pipeline</b>	None	Bulk Product Transfer Facility	Above ground storage tank farm with bulk product transfer of fuel from dock. This site brings in and stores jet fuel for the Dover Air Force Base.	Site not currently under any active remediation.	987 Port Mahon Road, Little Creek	36.8
<b>DuPont Edgemoor</b>	Chemours Edgemoor	Chemical Processing Plant	Not currently in active use. Current owner is Diamond State Port Corporation.	Active remediation under a state-led RCRA Corrective Action program	4600 Hay Road, Edgemoor	128.6
<b>Formosa Plastics</b>	Delaware City PVC, Stauffer Chemical Company	Chemical Processing Plant (PVC Production)	Not currently in active use. Formosa shut down operations on the site in late 2018.	Active remediation under the EPA-lead Superfund program	780 School House Road, New Castle	53.1
<b>General Chemical</b>	Allied Chemical, Chemtrade, Delaware Valley Works "South Plant"	Chemical Processing Plant (Hydrofluoric Acid)	Not currently in active use. Current owner is D2.	Active remediation under an EPA-lead RCRA Corrective Action program.	6300 Philadelphia Pike, Claymont	92.3

<b>Site Name in 1999</b>	<b>Other Names for the Site</b>	<b>Pre-1971 Heavy Industry Use</b>	<b>Current Use</b>	<b>Status of Remediation</b>	<b>Site Address</b>	<b>Acres Within Footprint</b>
<b>Kaneka Delaware</b>	Delaware City Plastics	Chemical Processing Plant (Resins)	Corporate headquarters for 1715 River Road LLC (operating as Tri-Supply & Equipment), which uses the site for materials and equipment storage. The company sells and rents materials and equipment for the construction industry.	Active remediation under the state's HSCA Voluntary Cleanup Program	1685 River Road, New Castle	24.5
<b>Ocean Port Industries</b>	Evergreen Property Holdings LLC	Bulk Product Transfer Facility	Transfers bulk goods including cement, clinker, coal, ferrous sulfate, graded aggregate, gypsum, limestone, magnesium oxide, pelletized wood, scrap iron, pumic, soil, stone, titanium, urea, and wood chips.	Active remediation under the state's Above Ground Storage Tank Program	6200 Philadelphia Pike, Claymont	71.2
<b>Oxy Chemicals</b>	Occidental Chemical Corporation ("Oxy Chem"), Diamond Alkali Company	Chemical Processing Plant (Chlorine, Caustic Soda, Potash, Hydrogen)	Not currently in active use.	Active remediation under an EPA-lead RCRA Corrective Action program, with state support	1657 River Road, Delaware City	58.9
<b>Port of Wilmington</b>	None	Port	Commercial shipping port	Active remediation under the state's HSCA Voluntary Cleanup Program	1 Hausel Road, Wilmington	1234.3
<b>Standard Chlorine</b>	Metachem	Chemical Processing Plant (Chlorinated Benzenes)	Not currently in active use.	Active remediation under the EPA-led Superfund program, with state support	745 Governor Lea Road, New Castle	23.3

Site Name in 1999	Other Names for the Site	Pre-1971 Heavy Industry Use	Current Use	Status of Remediation	Site Address	Acres Within Footprint
<b>Star Enterprise</b>	Delaware City Refining Company LLC, Motiva Enterprises, PBF Energy	Oil Refinery	Oil refinery. Current owner is Delaware City Refining Company, LLC, a subsidiary of PBF Energy.	Active remediation under a state-led RCRA Corrective Action program	Numerous parcels, New Castle and Delaware City	1852.3
<b>Sun Oil</b>	Sunoco Partners Marketing and Terminals LP	Refinery Operations	Sun Oil has property that spans area in both Delaware and Pennsylvania. Only the Delaware portion is subject to the CZA, and that portion is only used for rail staging. A former flare on the site ceased operations in early 2019.	Active remediation under an EPA-lead RCRA Corrective Action program	6400 Philadelphia Pike, Claymont	62.1
<b>Uniqema</b>	Croda, Fujifilm, Imperial Chemical Industries (ICI) Atlas Point	Chemical Processing	There are three uses on the site. Croda manufactures surfactants primarily for the cosmetics and personal care industry. Croda also has a bio-based ethylene oxide production plant on site. FujiFilm Imaging Colorants manufactures inks and colorants used primarily for ink-jet printers. They also have an ink technology research lab on site. Sobieski utilizes part of the site for offices and a training center.	Active remediation under the state's HSCA Voluntary Cleanup Program	233 and 315 Cherry Lane and 900 Uniqema Blvd, New Castle	179.6

## 4. ORIGINS AND DESCRIPTION OF THE RAC

Under the CZCPA, the Delaware Department of Natural Resources and Environmental Control (DNREC) must develop regulations for Conversion Permits by October 1, 2019. DNREC decided, in order to be responsive to the statute and the diversity of interests around the Coastal Zone, to convene a regulatory advisory committee (RAC) to develop, by consensus to the greatest degree possible, the conceptual framework and approach to these new regulations. This same process was successfully used in the 1990s to create the framework for the then first and new CZA regulations.

To convene the RAC, DNREC:

- Sponsored an assessment to obtain the range of views on the new CZCPA and potential regulations (*see Appendix C: Coastal Zone Conversion Permit Act Process Recommendations Report*)
- Held two public workshops in November 2017 involving some 80 attendees to obtain feedback on the statutory changes to the CZA and the convening process for the regulation drafting (*see Appendix C: Coastal Zone Conversion Permit Act Process Recommendations Report*)
- Held a nomination process for members of the RAC
- Reviewed nominations and selected a range of RAC members to represent a diversity of interests and views, including environmental organizations, business and industry, affected communities, government planners, public health, and other diverse backgrounds (*see Appendix E: CZCPA RAC Membership List*)

The first meeting of the RAC took place in June 2018. The RAC then proceeded to convene over eleven half-to-full day meetings from June 2018 through April 2019. The RAC's purpose was to provide consensus recommendations, to the extent possible, to the Secretary of DNREC regarding the content, form, and scope of regulations for Conversion Permits. The RAC was asked to focus solely on the creation of additional regulations necessary to implement the intent of the CZCPA. The RAC was not charged with addressing the existing Regulations Governing Delaware's Coastal Zone.

DNREC developed, and the RAC reviewed and approved, a set of Procedures for RAC Operations (*see Appendix D: Procedures for RAC Operations*). In these procedures, the RAC set out roles and responsibilities for members, DNREC, a Chair, and a facilitator; established expectations for engagement in the RAC; and identified a decision rule for how decisions would be made regarding recommendations. The decision rule was defined as the consent of all or most committee members on the final recommendations issued by the RAC. The Procedures also allowed for the RAC to create work groups to help advise the RAC on various technical issues.

To ensure an effective and efficient process, DNREC appointed a RAC Chair and retained the services of a facilitator. The RAC Chair was Justice Randy J. Holland, who previously served on the Delaware Supreme Court for more than 30 years, retiring in March 2017. In agreeing to serve as Chair, Justice Holland requested that he serve as a non-voting member of the RAC to encourage consensus-based decision-making by the RAC. Facilitation was provided by Patrick Field with the not-for-profit, Consensus Building Institute (CBI).

## 5. SUMMARY OF WORK GROUPS

Per the DNREC Secretary's direction, the CZCPA RAC was the official body charged with providing recommendations to DNREC on the regulatory approach and content of new CZA regulations that will govern Conversion Permits. In addition, the RAC created and tasked four (4) Work Groups to provide the RAC with a range of technically feasible options or alternatives for consideration. The RAC asked that each Work Group develop the pros and cons of the various options developed. Work Groups were not to determine or recommend a specific option the RAC *should* pursue unless there was only one viable option. The Work Groups were established to address the following topics:

- Economic Effect
- Environmental Impact
- Offsets
- Risk Evaluation and Financial Assurance

The Work Groups were first convened in August 2018, and individual Work Groups completed their work between November 2018 and January 2019. Each Work Group's charge and membership are included in *Appendix H: Work Group Membership Lists, Meeting Summaries, and Products*.

The Work Groups labored extensively to produce a host of options for the RAC to consider. They were supported by both DNREC staff and an independent consultant with expertise in these fields, Industrial Economics of Cambridge, Massachusetts. Work Group outputs included an in-depth exploration of the range of financial assurance instruments and their appropriateness for different risk events, a set of options and a process flow for determining offsets to environmental impacts, and economic effect metrics to consider for Conversion Permit applications (please see *Appendix H: Work Group Membership Lists, Meeting Summaries, and Products*).

## 6. SUMMARY OF PUBLIC ENGAGEMENT

Given strong public interest in the CZCPA and the development of new regulations, DNREC and the RAC engaged the public in a number of ways. A brief summary of these activities is noted below. Public comments were welcomed throughout the RAC process via mail, email, and fax; during all RAC and Work Group meetings; and at the three public Open Houses. A summary of public input received on the RAC's preliminary recommendations is included in *Section 7: Final RAC Recommendations*.

- As noted above, DNREC held two public workshops in November 2017, involving some eighty (80) attendees, to obtain feedback on the statutory changes to the CZA and the convening process for the regulation drafting
- All RAC meetings were publicly noticed, open to the public, and included a time for public comment, including all Work Group meetings.
- DNREC staff engaged with various neighborhood groups and associations during the early work of the RAC. The goal of such engagement was to help fence-line communities, who are communities near or adjacent to a heavy industry use site, understand the regulatory development process and inform them of ways to provide input. DNREC attended meetings held by the following groups and communities:
  - Wilmington Neighborhood Planning Council Leadership (Sept. 5)
  - Edgemoor Coalition (Sept. 17)
  - Little Creek Town Council (Oct. 1)
  - Delaware City (Oct. 11)
  - Wilmington Neighborhood Planning Council, District 3 (Oct. 16)
  - Route 9 All Civic Associations (Oct. 24)
  - Wilmington Neighborhood Planning Council, District 1 (Nov. 20)
  - Claymont Renaissance Development Corporation (Dec. 5)
- The RAC and DNREC held three Open Houses in late February 2019 to obtain feedback from the public on the RAC's preliminary recommendations. The Open Houses were held in Claymont, Delaware City, and Wilmington on different nights. Each Open House ran from 5pm-8pm with the public able to attend at their convenience during those hours. The Open Houses included an overview presentation of the legislative changes and the RAC process in video form, as well as information stations, staffed by DNREC employees, on the RAC's preliminary recommendations (see *Appendix I: Public Open Houses Documents and Public Feedback Summary*). Seventy-four (74) members of the public attended the Open Houses across the three nights; some RAC members were also present at each Open House.
- During and after the Open Houses, the public was offered the opportunity to provide written feedback on the RAC's preliminary recommendations, with the purpose of informing future RAC discussions and final recommendations. These comments were collected by DNREC via feedback forms, made available at the Open Houses as well as online via the DNREC website. DNREC received a total of twenty-seven (27) individual comment form submissions (see *Appendix I: Public Open Houses Documents and Public Feedback Summary*). The RAC reviewed and deliberated upon public feedback received as it developed its final recommendations.
- The RAC's publicly available website served as a repository of information relating to the RAC and the CZA, including background information, meeting materials, public comment information, and information about the stakeholder engagement process.

## 7. FINAL RAC RECOMMENDATIONS

### A. BULK PRODUCT TRANSFER FACILITIES

#### **Background**

A bulk product transfer facility is any port or dock facility that is used to transfer bulk quantities of any substance between ships or between a ship and an onshore facility. Bulk product transfer only applies to the transfer of loose materials like liquids, salt, or grain. The transfer of goods stored in containers, in crates, or on palettes is not considered to be bulk product transfer.

For regulatory purposes, the CZA (and existing regulations) excludes three types of Coastal Zone facilities from the definition of “bulk product transfer facility”:

- Bulk product transfer facilities in operation on June 28, 1971
- Docking facilities or piers used for a single, permitted industrial or manufacturing facility in which the bulk product being transferred is raw material used to manufacture other products, or is a finished product being transported for delivery
- Port of Wilmington docking facilities

Otherwise, the CZA prohibits bulk product transfer facilities in the Coastal Zone unless granted a Conversion Permit to build such a facility on one of the 14 heavy industry use sites. To apply for a Conversion Permit, two conditions specific to bulk product transfer facilities must be met, in addition to the other requirements of the CZA:

- (1) The site must have had a docking facility or pier used for a single industrial or manufacturing facility on or before June 28, 1971
- (2) The facility must only be used to import products necessary for and fully utilized in the operation of one or more Coastal Zone facilities *and/or* export products produced by one or more Coastal Zone facilities

The only exceptions to the two conditions above are:

- (1) Grain can be transferred anywhere, regardless of origin or destination
- (2) A Conversion Permit cannot be granted for bulk transfer of liquefied natural gas

#### **Public Feedback provided on the RAC’s Preliminary Recommendations**

The public made the following general comments on the RAC’s preliminary recommendations on bulk product transfer facilities. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary*.

- Request that grain be treated the same as other bulk products and that all products bear the same requirements
- Concern that the details to be included in the required annual summary are not delineated specifically enough in the preliminary recommendations
- Concern about bulk transfer of natural gas liquids
- Request to add disaster planning in the event of a spill of bulk products

#### **RAC Final Recommendations on Bulk Product Transfer Facilities**

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following final recommendations regarding bulk product transfer facilities.

Conversion Permit regulations should require that:

- The following record keeping conditions apply to Conversion Permits:
  1. Records of specified bulk product transfer information (e.g., quantity of bulk product transfer, final destination of the product, date of product export) be kept on site at the bulk product transfer facility
  2. Bulk product transfer of grain only be required to keep records on the quantities and dates of imports and exports
  3. A summary of the specified information be submitted to DNREC on an annual basis
- Conversion Permits should, where practicable, be written to incorporate product categories so as to minimize the need for permit modification, or new permits for minor or related changes, in bulk products imported or exported
- Addition of a new bulk product category, not included in the existing permit, may require a permit modification or new permit due to potential impacts on financial assurance or environmental offsets

## B. PLANS FOR POTENTIAL IMPACTS OF SEA LEVEL RISE AND COASTAL STORMS

### **Background**

Sea levels in Delaware have risen by more than a foot over the past 100 years. Recent projections by Delaware's Sea Level Technical Advisory Committee indicate that sea levels are continuing to rise, as a result of global climate change. By 2050, sea levels could rise between 0.7 and 1.9 feet in the state. Sea level rise causes inundation of normally dry land, wetlands, and infrastructure. It also causes saltwater intrusion into groundwater and can decrease the depth to groundwater.

Coastal storms, like nor'easters and tropical storms, are a common occurrence in Delaware. Coastal storms often feature heavy rain, high winds, and higher than normal tides. High waves are also normally associated with coastal storms.

Sea level rise, coupled with coastal storms, is increasing the risk of flood damage to shorelines, infrastructure, and structures in coastal areas statewide. Delaware has comprehensively studied this issue and there are many publicly available resources to help landowners reduce their risk. Per the CZCPA, all Conversion Permit applicants must provide "A plan to prepare the site for potential impacts of sea-level rise and coastal storms over the anticipated useful life of the facility and infrastructure in connection with the applied-for use."

### **Public Feedback provided on the RAC's Preliminary Recommendations**

The public made the following general comments on the RAC's preliminary recommendations on plans for potential impacts of sea level rise and coastal storms. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary*.

- Concern that the default, 30-year planning horizon for the useful life of the facility is too short, given the long-term impacts of sea level rise and coastal flooding
- Concern that the 10-year plan update will lead to potential costly changes for a permitted facility
- Concerns about the quality and up-to-date nature of FEMA floodplain maps
- Concerns that Category 1 hurricanes and 95 mph wind speeds are insufficient standards for coastal storms planning

- Requests that sea level rise and coastal storm plans include details on safe shutdown in the event of storms, containment of hazardous materials in a storm or flood, disaster planning, and resilient design practices

### ***RAC Final Recommendations on Plans for Potential Impacts of Sea Level Rise and Coastal Storms***

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following final recommendations regarding plans for potential impacts of sea level rise and coastal storms.

- The Plan should detail risk, likely impacts, and mitigation measures for the following geographic areas:
  - The site’s shoreline
  - Docks, piers, and offshore pipelines
  - All remediation areas on-site (including completed remediation areas and those in progress)
  - All structures on-site
  - Ingress/egress routes
- The Plan should include a discussion of any potential negative impacts to adjacent parcels resulting from development and flood mitigation activities
- The Plan should address the following hazards over the anticipated useful facility life:
  - Flooding, including the:
    - 1% chance flood (the current 100-year floodplain as defined by the effective FEMA maps)
    - 0.2% chance flood (the current 500-year floodplain as defined by the effective FEMA maps)
    - High sea level rise scenario (as defined by the effective Delaware Sea Level Rise Technical Committee recommendations)
    - Combined effect of sea level rise and 1% chance flood
  - Shoreline erosion
  - Wind speeds up to 95 mph, sustained
- The Plan should address measures necessary to evacuate, suspend operation(s), and secure the facility, when necessary, due to significant coastal storm events
- Any update to a permittee’s Sea Level Rise and Coastal Storm Plan should be posted on the DNREC website for the public and be subject to written public comment for 30 days

## C. ECONOMIC EFFECT

### ***Background***

Economic effect is the economic benefit a development project brings to Delaware. Economic effect has three components:

- Direct Effect – Jobs and revenue (such as taxes) generated by the site preparation, construction, and operation of the developed facility
- Indirect Effect – Jobs and revenue generated by the suppliers of goods and services for the developed facility (such as raw goods or cleaning services). In other words, the indirect workforce generates jobs and revenue by providing goods and services to the direct workforce

- Induced Effect – Jobs and revenue generated by industries that benefit from the wages of employees of the developed facility being “re-circulated” into the local economy. In other words, the direct workforce earns wages, and those wages are spent locally on other things (like food, entertainment, or healthcare), which generates jobs and revenue

The CZA states that economic effect must account for:

- Jobs created
- Income generated by the wages or salaries of new jobs (in relation to the land required for development)
- Potential tax revenues accrued to state and local government

Conversion Permit applicants must do the following in their application:

- Provide economic effect information for two scenarios:
  - Their development project
  - The most recent heavy industrial use on the site
- Compare the economic effect of the two scenarios above

***Public Feedback provided on the RAC’s Preliminary Recommendations***

The public made the following general comments on the RAC’s preliminary recommendations on economic effect. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary*.

- Concern that DNREC cannot compel an outside party to prepare the baseline economic impact report
- Concerns that by limiting the phrase “existing or previous use” to only heavy industry uses, the Secretary would not be required (under 7014(c)(1)) to consider the environmental impact and economic effect of a site’s existing use if it is not heavy industry (i.e., the Secretary should consider whether the proposed new heavy industry use would supplant an existing, less harmful and possibly more economically beneficial use of the site by non-heavy industry)
- Concerns that the recommendations do not require the Secretary to consider the potential negative economic effect of a given project; for example, lower property taxes due to reduced property values for nearby residential or commercial properties; harm to tourism and recreation-related businesses; harm to local fisheries; financial impacts regarding the health of residents; livability/viability of communities; resale/property values; residents' willingness to invest/maintain/improve properties; and the stability of communities/businesses whose taxes support Delaware towns, counties, schools, and the state itself
- Concern that under Section 7014(c)(3), the RAC does not spell out how environmental or economic improvement is analyzed or measured
- Concerns that environmental justice and public health concerns are not accounted for in the permitting process
- Requests that the “Employment” category of economic metrics specify the number of jobs and the expected duration and type of each job or category, including whether the job is permanent/temporary, full time/part time, contractor/permanent
- Requests that only outside, independent analysts conduct (or at least verify) economic effect assessments

**RAC Final Recommendations on Economic Effect**

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following final recommendations regarding economic effect.

- Conversion Permit regulations should define “existing or previous use” to mean the same as “most recent heavy industry use” or current use (if not a heavy industry use). Regulations should also hold that “economic effect” and “net economic improvement” use the same economic metrics
- In order to ensure a commonly understood baseline for economic effect, the State of Delaware will prepare a “baseline report” that will detail the economic effect of the most recent heavy industry use and current use (if not a heavy industry use) of the 14 sites. The applicant may use this baseline report, plus additional information they want to include, to prepare their Conversion Permit application
- Conversion Permit regulations should require that the applicant submit economic metrics for the following categories when reporting economic effect and net economic improvement:

Category	Specific Project Information Requested
Project Cost	Remediation, demolition, construction, operations, and capital costs; total investment costs
Tax Revenue	Property tax, gross receipts tax, personal income tax, corporate income tax, and other taxes; Conversion Permit applicants could be asked to take into account tax incentives or credits received or anticipated, as well as income tax write-offs in the tax numbers provided
Employment	Number of jobs and the expected duration and type of each job or category (such as whether the job is permanent/temporary, full-time/part-time, contractor/permanent); wages; and occupation distribution for all jobs expected to be created for site preparation, construction, and facility operations
State- and Community-Level Effect	Identification of local hiring preferences; local purchasing preferences; and investments in community benefit agreements, workforce development programs, or educational programs
Other Costs to the State	Tax incentives and credits; required infrastructure investment

- The RAC recommends that the Secretary consider any potential negative economic effect from the activity or facility set forth in the Conversion Permit
- The RAC agreed that DNREC should verify the economic information submitted by the applicant. DNREC may use any number of options for verifying the applicant’s submitted economic effect data and conclusions. These options could include, but are not limited to, applicant-provided data and case studies, state agency review by the appropriate agencies and staff, retention of an expert academic or consulting economist or economics firm, or the establishment of a more formal panel of experts from across the state (such as state employees and/or others)
- The RAC emphasizes that local, robust hiring is an intent and goal of the CZCPA. Thus, the RAC recommends that the Secretary, to the degree his or her role and authorities allow, seek to encourage and ensure such local hiring preferences and actions

## D. ENVIRONMENTAL IMPACT

### **Background**

Environmental effects or impacts are caused by things such as:

- The construction or operation of an industrial facility or infrastructure project
- The release of a substance into (or a disturbance to) the environment

Environmental impacts may affect air, water, land, or living organisms, starting from where the impact originates. Impacts can be positive, negative, or neutral. The original CZA provides a detailed list of environmental impacts that must be addressed by applicants for a Coastal Zone Permit or a Conversion Permit. These include but are not limited to: probable air and water pollution likely to be generated by the proposed use under normal operating conditions, as well as during mechanical malfunction and human error; likely destruction of wetlands, flora, and fauna; impact of site preparation on drainage of the area in question (especially as it relates to flood control); impact of site preparation and facility operations on land erosion; effect of site preparation and facility operations on the quality and quantity of surface, ground and subsurface water resources, such as the use of water for processing, cooling, effluent removal, and other purposes; in addition, but not limited to, likelihood of generation of glare, heat, noise, vibration, radiation, electromagnetic interference and obnoxious odors.

Conversion Permit applicants must do all of the following in their application:

- Develop an Environmental Impact Statement (EIS) for their proposed development
- Provide information on the environmental impacts of two scenarios:
  - Their proposed development
  - The most recent heavy industrial use on the site
- Compare the impacts of the two scenarios above

### **Public Feedback provided on the RAC's Preliminary Recommendations**

The public made the following general comments on the RAC's preliminary recommendations on environmental impact. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary*.

- Concern that proposing a "baseline" of "current use and existing conditions" does not meet the required comparison to the "most recent heavy industry use" for either net environmental improvement or offset determination purposes
- Concerns that assessment of public health, community and environmental justice impacts are not called for, nor clearly spelled out
- Request that environmental impacts include all potential impacts to all flora and fauna, not just those listed at the state and federal level, as well as estimating the potential direct and indirect impacts to flora and fauna as a result of accidental release or malfunction
- Concern that the recommendations are not explicit about including carbon dioxide emissions as a pollutant
- Concern that the required environmental impacts are not delineated as clearly and specifically as the economic impacts
- Concern that the RAC does not address how environmental or economic improvement is determined or measured

### **RAC Final Recommendations on Environmental Impact**

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following final recommendations regarding environmental impact.

- DNREC should produce a baseline report of current use and existing environmental conditions, impacts, and risks on the 14 heavy industry use sites (including but not limited to those items described in CZA Section 7015). In his or her Conversion Permit application, the applicant may describe any proposed changes from that baseline, further elaborating on the DNREC baseline report as they wish (including providing additional information on the environmental history of the site, if necessary, to explain how the existing environmental conditions came about)
- For CZCPA purposes, environmental impacts should be characterized in the same manner used to characterize environmental impacts under the current CZA permit program, consistent with the existing CZA statutory definition of “environmental impact” (Section 7004(b)(1))
- Direct and cumulative impacts should continue to be considered for Conversion Permits, per the existing Regulations Governing Delaware’s Coastal Zone, Section 8.3.2

## **E. OFFSETS**

### **Background**

Offsets are actions used to ameliorate negative environmental impacts. Certain environmental laws require developers to carry out offset “projects” to counteract the negative environmental impacts caused by their proposed development. Offset projects need to take into account:

- Type – What the impact is (for example, air vs. water pollution)
- Location – Where the impact originates, how far the impact reaches
- Timing – How long the impact lasts, how often the impact is generated
- Affected Community – What people or other living organisms are impacted

Offsets are most effective when the project ameliorates the impacts as closely as possible in Type, Location, Timing, and Affected Community. Offsets are intended to be undertaken only after all reasonable steps have been taken to avoid the negative impact in the first place.

Conversion Permit applicants must, in their application, propose an offset project that both:

- “More than offsets” the impacts of their proposed development “on an annual basis,” and
- Favors offsets that directly benefit Delaware

### **Public Feedback provided on the RAC’s Preliminary Recommendations**

The public made the following general comments on the RAC’s preliminary recommendations on offsets. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary*.

- Request that the RAC modify the recommendations to make clear that the steps in Recommendations #3-8 be sequential. As such, an applicant must first engage in Step #3 and not move to Step #4 unless they demonstrate to DNREC’s satisfaction that a “Step #3” offset is not feasible
- Concerns that offsets do not address the cumulative impacts over time from both existing and new multiple facilities

- Request that minimizing or avoiding impacts should be the first and clearly stated priority, not offsetting them
- Concern that the recommended offsets process allows for offsets that do not directly relate to environmental impact (e.g., donation to a bird rescue and/or rehabilitation organization)
- Request that the offset proposal cover environmental impacts over the expected life of the facility rather than the duration of the permit
- Request that offset proposals offset more than the expected adverse impacts by a quantified number (e.g., at least 50% more)

### ***RAC Final Recommendations on Offsets***

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following final recommendations regarding offsets.

- Note that under 7 Del. C. § 7014 all offset proposals shall favor offsets that directly benefit Delaware
- The offset proposal must more than offset all environmental impacts, including, but not limited to, one-time impacts and annual environmental impacts
- An offset project should be located as close as possible to the site and, to the greatest extent possible be consistent with the negative impact in medium, duration, timing, and pollutant
  - For example, if “adverse impact” is the emission of 10lbs of NOx annually, the most suitable offset is to reduce another source of NOx on the site by more than the new emission
  - Or, if a new process will emit 90 decibels of noise, 12 hours per day, over some specified time period, the offset could focus on reducing other sources of noise in the community (e.g., building structures to reduce noise from a nearby highway or facilitating a change in truck routes to reduce truck-related noise in the local community)
- If the applicant is unable to identify an offset for the same pollutant in the same medium on or close to the site, then they should offset a similar pollutant or environmental impact. “Similar” means a pollutant that has the same type of effect on the environment when it is released (e.g., offset a benzene (a Volatile Organic Compound [VOC]) emission that would affect ozone with a different VOC (xylene))
- If it is not possible to offset a particular environmental impact on or near the site, then the applicant should identify an offset project for the pollutant in the same medium somewhere else in the Coastal Zone, but as close as possible to the site
- If it is not possible to offset the same pollutant or impact somewhere else in the Coastal Zone, then the applicant should search for another location in Delaware, with preference given to potential projects closer to the Coastal Zone
- If the applicant is not able to identify an appropriate offset project through the previous steps, they should consider:
  - The environmental effect and attempt to identify an offset as close to the site as possible that will counter that negative effect
  - An offset for the same pollutant in a different medium as close to the site as possible
- If the applicant is not able to identify an appropriate offset project through the previous steps, the applicant may propose an alternative environment improvement project of commensurate value to Delaware’s coastal resources, as close to the site as possible. Such projects might

include recreational access opportunities, waterfront community engagement, or other community benefits, with a nexus to net ecological improvement

- Related considerations and recommendations:
  - To the extent feasible, the offset process should encourage concurrent permitting or consultation to provide administrative efficiencies, and to facilitate coordination among the applicant and regulators
  - With respect to the location of offset projects, local impacts should be offset locally and the applicant should directly and meaningfully engage the community in consideration of offsets
  - Minimizing environmental impacts is a priority in the CZCPA process. The offset process is intended to address environmental impacts that cannot be avoided or further minimized
  - The existence of an offset process does not in any way limit DNREC’s authority to reject Conversion Permit applications with environmental impacts determined to be too severe, or for which potential offset projects have insufficient nexus
  - The Secretary should provide greater clarity on the process and procedures for demonstrating offset consistency with these rules and priorities

## F. FINANCIAL ASSURANCE

### **Background**

Financial Assurance is a way for an owner or operator of an industrial site to guarantee that a certain amount of money will be available to address environmental contamination on the site. Certain environmental laws require financial assurances; though exact requirements differ based on the:

- Type of industrial operation
- Type of contamination
- Scenario that causes the contamination
- Timescale for providing financial assurance
- Amount of money required to be guaranteed
- “Tools” allowed to be used for financial assurance

Financial assurance comes into play when the owner or operator of the site is unable or unwilling to address the contamination. When this happens, the environmental regulator is able to access the money guaranteed by the financial assurance to address the contamination.

Various “tools” are used for financial assurance. Some tools are provided by a third party, like a bank or insurance company. Example third-party tools include a trust fund, letter of credit, insurance policy, or surety bond. Other tools, called self-insurance, are provided by the owner or operator itself. Example self-insurance tools include a corporate financial test, corporate guarantee, or captive insurance.

The CZA requires Conversion Permit applicants to provide financial assurance for three scenarios:

- (1) Contamination on the project site at the time of application
- (2) Termination, liquidation, or abandonment of heavy industry or bulk product transfer activities on the project site
- (3) Future incidents that result in environmental contamination on the project site

For Scenario (1), financial assurance must guarantee sufficient funds to comply with the Delaware Hazardous Substance Cleanup Act and any other laws that relate to existing contamination on the project site.

For Scenarios (2) and (3), financial assurance must guarantee sufficient funds to minimize environmental damage and stabilize and secure the project site in either of these situations. The applicant must submit a “concept” financial assurance plan with their permit application. If the permit is issued, a “final” plan must be approved by DNREC before operations on the project site can begin.

### ***Public Feedback provided on the RAC’s Preliminary Recommendations***

The public made the following general comments on the RAC’s preliminary recommendations on financial assurance. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary*.

- Concern that the duration of financial assurance needs to be more clearly prescribed. For example, by linking it to the duration of the permit
- Concern that the recommendations do not cover how to determine the required dollar amount of financial assurance, leaving too much discretion to DNREC
- Concerns about self-insurance being allowed as a financial assurance instrument, and the Secretary’s discretion to allow its use
- Concerns that the time period of financial assurance review is not clearly specified
- Request that contamination events be covered by financial assurance tools
- Request that the terms “environmental damage” (or “environmental contamination”) be more clearly defined by the Secretary under financial assurances

### ***RAC Final Recommendations on Financial Assurance***

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following table of recommendations per financial assurance (see below). This table provides information on: (1) event categories of expected financial risk, (2) the process used in establishing financial assurance for each risk event, (3) the way to determine the amount of financial assurance necessary to meet the requirements of the CZA, (4) the types of financial assurance instruments available, and (5) each instrument’s ability to both adapt to the time horizon of a risk event and to ensure funds are available in the time and amount necessary.

In addition to this table, the RAC offered the following final recommendations:

- Financial assurances, in general, must be commensurate with the use (and associated risks) proposed by the Conversion Permit applicant
- The form and amount of financial assurances should be reviewed at appropriate periodic intervals, since financial conditions can change once a Conversion Permit is in place. Such review should occur for the life of that permit
- The Secretary should define more clearly “environmental damage,” as outlined in the statute. Does such damage include natural resources damages, public health damages, or economic loss associated with natural resource-related activities such as fishing, swimming, boating, and beach-going?
- The RAC supports providing a range of financial assurance instruments, from trust funds to captive insurance, as described in the table below. However, because the time frame until

potential termination, abandonment, or liquidation of site activities is potentially several decades out and the potential that bankruptcy could cause such closure, self-insurance instruments are not preferred as actions to minimize environmental damage, and stabilize and secure the site upon termination, abandonment, or liquidation of site activities. Thus, the RAC recommends the following:

- The Secretary should consider either offering expedited or less complex review for applicants who use third-party instruments, or a clearly described, sequential process where the applicant has to explain why, how, and what protections are in place should they utilize self-insurance options
- Like all instruments, self-insurance instruments will need to be reviewed at the appropriate periodic intervals
- DNREC's review of self-insurance options will likely require expertise beyond DNREC's current staffing and expertise. Thus, the Secretary should ensure that, for any applicant utilizing self-insurance, DNREC is able to cover the additional administrative costs of reviewing and considering such financial instruments, and that such costs be taken into account when determining the application fee
- The RAC encourages the Secretary to ensure that he or she has the authority, in the periodic review of self-insurance instruments, to require those who self-insure to carry a blended approach of third-party and self-insurance instruments and/or to move to only third-party instruments, as circumstances merit

**CZCPA FINANCIAL ASSURANCE (FA) RISK CATEGORIES, PROCESSES, AMOUNTS, AND TYPES OF INSTRUMENTS  
RAC FINAL RECOMMENDATIONS**

Risk Event Category	FA Process	FA Amount	Types of FA Instruments						
			Third-Party Instruments				Self-Insurance		
			Trust Fund	Letter of Credit	Insurance Policy	Surety Bond	Corporate Financial Test	Corporate Guarantee	Captive Insurance
<p>Actions to address existing site contamination.</p> <p>Time Horizon: Short to Medium Term</p>	<p>CZCPA applications should identify actions, and associated FA, to address current site contamination. DNREC conducts application-specific evaluations of the sufficiency of existing FA, coordinating with other state and federal personnel familiar with the site.</p>	<p>The need for and amount of Conversion Permit FA should be determined on an application-specific basis. Such determination should be based on the degree to which existing FA at the site is sufficient to meeting existing site needs. Amount of FA should be incremental to all existing site FA.</p>	●	●	●	●	●	●	● <i>Funds Availability</i>
<p>Actions to minimize environmental damage, stabilize and secure the site 'upon termination, abandonment or liquidation of site activities'</p> <p>Time Horizon: Medium to Long Term</p>	<p>A "concept plan" of action(s) must be submitted with the Conversion Permit, along with a proposal for associated FA. Upon DNREC approval of a "final plan", the permit applicant should be required to procure the approved FA and evince such FA to DNREC prior to site operation.</p>	<p>Face value should be equal to the estimated cost of completing the activities in the DNREC-approved plan, including DNREC oversight/ administration costs. The face value should be downward adjusted to the degree existing FA covers activities identified in the DNREC-approved plan.</p>	●	●	●	●	● <i>Not Adaptive to Long Time Horizons</i>	● <i>Funds Availability</i>	● <i>Not Adaptive to Long Time Horizons</i>
<p>Actions to address future incidents resulting in environmental contamination</p> <p>Time Horizon: Short, Medium, or Long Term</p>	<p>Any approved permit should include language stating that FA will be required to address site-specific actions to address environmental contamination incidents if/when they occur. DNREC should be mindful that other existing state/federal requirements may affirmatively require FA for such actions pursuant to other regulatory authorities.</p>	<p>The Secretary should consider a two-pronged approach for future possible but unknown incidents. First, the Secretary should evaluate the potential use and availability of insurance or similar mechanisms to ensure availability of some funding in advance of the occurrence of a future triggering event. Second, following an incident, DNREC should ensure that sufficient FA is put in place such that the face value should be equal to the estimated cost of specified actions to minimize environmental damage, including DNREC oversight/ administration costs. The face value should be downward adjusted to the degree existing FA covers such actions.</p>	●	●	●	●	● <i>Short Term</i>	● <i>Short Term</i>	● <i>Short Term</i>
							● <i>Medium to Long Term</i>	● <i>Medium to Long Term</i>	● <i>Medium to Long Term</i>

<p>Maintenance or repair of site or infrastructure improvements to address sea level rise or coastal storms</p> <p>Time Horizon: Short to Long Term</p>	<p>CZCPA applications should identify any site or infrastructure improvements that will be undertaken to address sea level rise or coastal storms. DNREC conducts application-specific evaluation of the extent to which FA is needed to ensure sufficient funds to address associated maintenance and/or potential future repair.</p>	<p>Face value should be equal to the estimated cost to maintain and/or repair relevant infrastructure and site improvements, including DNREC oversight/ administration costs. The face value should be downward adjusted to the degree existing FA covers such actions.</p>	●	●	●	●	● <i>Short Term</i>  ● <i>Medium to Long Term</i>	● <i>Short Term</i>  ● <i>Medium to Long Term</i>	● <i>Short Term</i>  ● <i>Medium to Long Term</i>
---	--	---	---	---	---	---	---	---	---

**KEY:**

- FA instrument is adaptive to the time horizon of the risk event **and** provides reasonable assurance of funds availability in the timing and amounts necessary assuming the instrument is structured correctly.
- FA instrument is not easily adapted to the time horizon of the risk event **or** may not provide reasonable assurance of funds availability in the timing and amounts suggested by the risk event category.
- FA instrument is not easily adapted to the time horizon of the risk event **and** does not provide the regulator with reasonable assurance of funds availability.

## G. CROSS-CUTTING ISSUES

### **Background**

There are a number of issues that are relevant to the other six topic areas. These “Cross-Cutting Issues” include:

- *Definition of “Project Site,”* which determines the physical boundaries of the project subject to a Conversion Permit
- *Definition of “Useful Life,”* which may affect such issues as plans for potential impacts of sea level rise and coastal storms, as well as financial assurance
- *Permit Duration, Modification, Renewal, and Revocation,* for, unlike the current Coastal Zone Permits, which are granted “one and done” much like a land use permit, the Conversion Permit, given its scale, complexity, and potential impacts, may require a permit term.
- *Permit Monitoring and Reporting Post-Approval,* again, given the complex nature of the Conversion Permits

### **Public Feedback provided on the RAC’s Preliminary Recommendations**

The public made the following general comments on the RAC’s preliminary recommendations on the aforementioned cross-cutting issues. For a full summary of all public feedback, please see *Appendix I: Open Houses Documents and Public Feedback Summary.*

- Request that there be a time period defined within which DNREC must act on permit renewals so that the permit cannot continue indefinitely
- Concern that there is a presumption that a permit will be renewed
- Concern about the permit duration, particularly that it should be shorter (10 or 5 years were mentioned)
- Concern that permit renewal does not include a review of “Environmental Impacts” listed specifically as a focus in the second paragraph
- Request that inspections occur annually
- Concern that the 14 heavy industry use sites can be subdivided, potentially resulting in more than 14 Conversion Permits over time. Request that only one type of heavy industrial use be allowed on each of the 14 sites
- Concern that the permit modification language should be differently defined or may not be necessary since new activities should require a new permit application
- Question about how CZA applies to possible expansion into properties adjacent to the 14 grandfathered CZA sites

### **RAC Final Recommendations on Cross-Cutting Issues**

After deliberations, including reviewing public feedback, the RAC reached consensus among all its members on the following final recommendations for the aforementioned cross-cutting issues.

- *“Useful life”* means the period of time that an applicant or permittee expects to operate a facility that requires a Coastal Zone Conversion Permit. The useful life equals thirty (30) years unless the Secretary allows an application for, or issues a permit for, a different time period. This definition is potentially pertinent to sea level rise planning, financial assurances, and offsets

- *Conversion Permit duration* (both for the initial permit and any renewed permit) should be 20 years
- Regarding *Conversion Permit monitoring and reporting post-approval*:
  - *For Site Plans for Sea Level Rise and Coastal Storm Impacts*: At least every 10 years, the permittee should update their Sea Level Rise and Coastal Storm Plan for the project site
  - *For Offsets*: Applicant should provide a monitoring schedule that describes a process for third-party verification of an offset project's operation and completion
  - *For Financial Assurance*: A Conversion Permittee should annually, within ten (10) days of the anniversary date of issuance of its permit, submit to DNREC evidence that the financial assurance required by the permit is in effect in the amount required by the permit and that the permittee has taken all necessary measures to ensure that the financial assurance will remain in effect throughout the relevant time periods for each type of financial assurance required
  - *For Bulk Product Transfer*: The permittee should submit an annual report (as previously recommended by the RAC)
  - *For Site Inspections*: DNREC access to the site should be allowed at reasonable times and on a regular basis, with reasonable times generally meaning operating hours
- Regarding *Conversion Permit revocation*, the Secretary may revoke a permit for significant or repeated violations, including but not limited to:
  - A lapse in financial assurance
  - Failure to complete or maintain an offset
  - Denial of DNREC access to the permitted site or to records related to (or required to be kept by) a permittee
  - Making any false statement, representation, or certification in an application, record, report, plan, or other document filed (or required to be maintained by) the permit
- *Modifications to an existing Conversion Permit* would be allowed. If the Secretary grants a request for a modification, only the conditions subject to modification are reopened. The remainder of the permit remains as is. Modifications would occur in two forms:
  - *Minor modifications* would be for administrative changes and would not require public notice. Administrative changes include, but are not limited to, corrections of spelling or grammatical errors, a change in only the name of the owner or operator of a permittee, or other administrative matters that do not affect the substantive requirements prescribed by the permit. DNREC should post minor modifications on its website and listservs
  - *Major modifications* would be changes that affect the substantive requirements of the permit and would require public notice and review. A modification of the ownership or operating entity in a permit shall be granted only in the event that the prospective permittee satisfies all the applicable requirements under these regulations
- *Conversion Permit renewal* should be allowed. The application for permit renewal should be submitted no fewer than 180 days prior to expiration. So long as there is a timely renewal application, the permit should continue until the renewal application is acted upon by DNREC. The RAC notes that DNREC already has permitting review timelines required under the Coastal Zone Act. The renewal process should be streamlined, as compared to the original application,

and focused on environmental impacts and offsets, financial assurance, and sea level rise and coastal storm planning and should take into account the applicant's compliance record.

- *“Project Site”* means the physical location at which a permitted facility operates or the location where a proposed project, that is the subject of a Conversion Permit application, will operate. A project site may comprise an entire tax parcel, or parcels, or part(s) of any tax parcel(s); however, its preliminary boundary shall be defined prior to the issuance of a permit in the application for a permit, and its final boundary, after a permit is granted by the Secretary, shall be defined in the permit. For nonconforming uses, if a project site's boundary is not defined in a permit, the boundary is the footprint in Appendix B of the Regulations Governing Delaware's Coastal Zone. A Conversion Permit may not be granted for a heavy industry use or bulk product transfer facility outside a heavy industry use site depicted in Appendix B
  - **NOTE:** *One member objected to this definition of Project Site because they are concerned that heavy industry use sites will be subdivided, leading to multiple permittees, numerous smaller uses, greater risks across the site as a whole, high monitoring costs to DNREC, and the potential of “high grading” the site so some portions are left contaminated and not remediated nor restored to industrial use. All members did agree that the Secretary should provide greater clarification on how changing project site boundaries, such as through subdivision, would be a major permit modification*

## 8. APPENDICES (electronically available)

The appendices of this report list and link to meeting summaries and key documents that were part of the CZCPA RAC's deliberation and recommendation-making process. Copies of these documents are also available upon request from the DNREC Coastal Zone Act Program.

Additional documents that were part of the CZCPA RAC process can be found at [de.gov/czcparac](https://de.gov/czcparac).

### Appendix A: Statutes and Existing Regulations

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/conversionpermits](https://de.gov/conversionpermits).

- [Coastal Zone Act \(7 Del. C. §§ 7001-7015\)](#)
- [Coastal Zone Conversion Permit Act \(81 Del. Laws, c. 120\)](#)
- [Regulations Governing Delaware's Coastal Zone \(Effective May 11, 1999\)](#)

### Appendix B: Heavy Industry Use Site Maps and Descriptions

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/czcparac](https://de.gov/czcparac), unless otherwise noted.

#### Maps and Spatial Information

- [Maps of the Delaware Coastal Zone and the 14 Heavy Industry Use Sites](#)
- [Interactive Map Viewer of Delaware's Coastal Zone and the 14 Heavy Industry Use Sites](#) (accessible via [de.gov/czamap](https://de.gov/czamap))
- [Spatial Data and Information for Areas Surrounding the 14 Heavy Industry Use Sites](#)
- [Flood and Sea Level Rise Risk at the 14 Heavy Industry Use Sites](#)

#### Contamination and Remediation Information

- [Remediation Status Baseline Report on Existing Heavy Industry Use Sites \(September 2017\)](#)
- [Remediation Status Baseline Report on Existing Heavy Industry Use Sites \(December 2018 Update\)](#)
- [14 Heavy Industry Use Sites Fact Sheets](#)

### Appendix C: CZCPA Process Recommendations Report

The hyperlinks below link to the listed document. This document can also be accessed via [de.gov/czcparac](https://de.gov/czcparac).

[Final Coastal Zone Conversion Permit Act Process Recommendations Report with Appendices](#)

### Appendix D: Procedures for RAC Operations

The hyperlink below links to the listed document. This document can also be accessed via [de.gov/czcparac](https://de.gov/czcparac).

[Final Procedures for RAC Operations](#)

## Appendix E: CZCPA RAC Membership List

Listed below are the members of the CZCPA RAC as of April 16, 2019. Each RAC member, with the exception of the Chair, has an organization or constituency to which he or she was affiliated when the CZCPA RAC was convened. These affiliations are also listed below.

RAC Chair: Justice Randy J. Holland, retired

### RAC Members:

- Jennifer Adkins – Partnership for the Delaware Estuary  
*(designated alternate Joshua Moody)*
- William Ashe – International Longshoremen’s Association 1694  
*(designated alternate Ronald “Kimoko” Harris)*
- Neeraj Batta – Batta Environmental
- Brenna Goggin – Delaware Nature Society  
*(designated alternate Mary Peck)*
- Michael Hackendorn – Delaware Building and Construction Trades Council
- Ronald Handy, Sr. – Boys & Girls Club of Delaware  
*(designated alternate Dora Williams)*
- S. Douglas Hokuf, Jr. – New Castle County  
*(designated alternate Mark Wolanski)*
- Herb Inden – City of Wilmington  
*(designated alternate Tim Lucas)*
- Tim Konkus – Delaware City Marina & Main Street Delaware City, Inc.  
*(designated alternate Jeffrey Gordon)*
- Larry Lambert<sup>1</sup> – Claymont Renaissance Development Corporation  
*(designated alternate Frances West)*
- Awele N. Maduka-Ezeh – Public Health Representative
- James Maravelias – AFL-CIO
- Jerry Medd – Pilots’ Association for the Bay and River Delaware  
*(designated alternate Jack Hanley)*
- Jeffrey Richardson – Imani Energy
- Robert Whetzel – Richards, Layton & Finger Law Firm  
*(designated alternate James DeChene)*
- Delores Whildin – Resident of Claymont  
*(designated alternate Brett Saddler)*
- Marian Young – BrightFields, Inc.  
*(designated alternate Kathy Stiller)*

---

<sup>1</sup> Effective at the October 9, 2018 RAC Meeting, Larry Lambert replaced V. Eugene McCoy, Jr., as a member of the CZCPA RAC. Dr. McCoy passed away during the RAC’s early proceedings. Dr. McCoy represented the Council of Civic Organizations of Brandywine Hundred, Inc.

## Appendix F: RAC Meeting Agendas

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/czcparac](http://de.gov/czcparac).

- [June 14, 2018 Meeting Agenda](#)
- [July 12, 2018 Meeting Agenda](#)
- [August 21, 2018 Meeting Agenda](#)
- [September 12, 2018 Meeting Agenda](#)
- [October 9, 2018 Meeting Agenda](#)
- [November 7, 2018 Meeting Agenda](#)
- [December 11, 2018 Meeting Agenda](#)
- [January 22, 2019 Meeting Agenda](#)
- [February 19, 2019 Meeting Agenda](#)
- [March 12, 2019 Meeting Agenda](#)
- [April 16, 2019 Meeting Agenda](#)

## Appendix G: RAC Meeting Summaries

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/czcparac](http://de.gov/czcparac).

- [June 14, 2018 Meeting Summary](#)
- [July 12, 2018 Meeting Summary](#)
- [August 21, 2018 Meeting Summary](#)
- [September 12, 2018 Meeting Summary](#)
- [October 9, 2018 Meeting Summary](#)
- [November 7, 2018 Meeting Summary](#)
- [December 11, 2018 Meeting Summary](#)
- [January 22, 2019 Meeting Summary](#)
- [February 19, 2019 Meeting Summary](#)
- [March 12, 2019 Meeting Summary](#)
- [April 16, 2019 Meeting Summary](#)

## Appendix H: Work Group Membership Lists, Meeting Summaries, and Products

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/czcparac](http://de.gov/czcparac) or [de.gov/czcpaworkgroups](http://de.gov/czcpaworkgroups).

### Economic Effect Work Group

- Membership List (with affiliations)
  - Patty Cannon – Department of State, Division of Small Business, Development and Tourism
  - Vince D’Anna – Self
  - Bill Freeborn – KBF Advisors, LLC
  - Michael Gould – Department of Insurance

- Jennifer Hudson – Department of Finance, Division of Revenue
- Paul Morrill – The Committee of 100
- Tamarra Morris – New Castle County, Economic Development
- Ed Ratledge – University of Delaware, Center for Applied Demography & Survey Research
- Brett Saddler – Claymont Renaissance Development Corporation
- George Sharpley – Department of Labor, Office of Occupational and Labor Market Information
- Meeting Summaries
  - [September 11, 2018 Meeting Summary](#)
  - [September 25, 2018 Meeting Summary](#)
  - [October 9, 2018 Meeting Summary](#)
  - [October 23, 2018 Meeting Summary](#)
- Products
  - [Economic Effect Work Group Charge](#)
  - [DNREC Clarification on the Economic Effect Work Group Charge](#)
  - [Economic Effect Work Group Initial Scope of Work](#)
  - [Economic Effect – Revised Options for RAC Review](#)
  - [Example Economic Effect Questions for RAC Review](#)

#### Environmental Impact Work Group

- Membership List (with affiliations)
  - Tim Cooper – Department of Health and Social Services, Office of Preparedness
  - Jay Cooperson – Sierra Club
  - David DeCaro – Chesapeake Utilities
  - Tom Godlewski – Delaware City Refinery / PBF Energy
  - Simeon Hahn – National Oceanic and Atmospheric Administration, Office of Response and Restoration
  - Jackie Howard – DNREC Division of Waste and Hazardous Substances
  - Angela Marconi – DNREC Division of Air Quality
  - Ellie Mortazavi – New Castle County, Department of Public Works
  - Bob Palmer – DNREC Division of Watershed Stewardship
  - Ian Park – DNREC Division of Fish & Wildlife
  - Craig Rhoads – DNREC Division of Fish & Wildlife
  - Matt Sarver – Delaware Ornithological Society
  - Kari St. Laurent – DNREC Division of Climate, Coastal, & Energy
  - Kristen Thornton – DNREC Division of Waste and Hazardous Substances
  - Ping Wang – DNREC Division of Water
- Meeting Summaries
  - [September 12, 2018 Meeting Summary](#)
- Products
  - [Environmental Impact Work Group Charge](#)
  - [Environmental Impact Work Group Initial Scope of Work](#)

## Offsets Work Group

- Membership List (with affiliations)
  - Jeremy Ashe – DNREC Division of Fish & Wildlife
  - Matt Brill – Self
  - James Brunswick – DNREC Community Ombudsman
  - Patty Cannon – Department of State, Division of Small Business, Development and Tourism
  - Sarah Cooksey – The Nature Conservancy
  - Gene Donaldson – DelDOT
  - Tom Godlewski – Delaware City Refinery / PBF Energy
  - Simeon Hahn – National Oceanic and Atmospheric Administration, Office of Response and Restoration
  - Doug Janiec – Sovereign Consulting
  - Todd Keyser – DNREC Division of Waste and Hazardous Substances
  - Vikram Krishnamurthy – Delaware Center for Horticulture
  - Rita Landgraf – University of Delaware, College of Health Sciences
  - Susan Love – DNREC Division of Climate, Coastal, & Energy
  - Ellie Mortazavi – New Castle County, Department of Public Works
  - Bob Palmer – DNREC Division of Watershed Stewardship
  - Mark Prettyman – DNREC Division of Air Quality
  - Craig Rhoads – DNREC Division of Fish & Wildlife
  - Peggy Schultz – League of Women Voters
  - Derrick Schweitzer – Croda
  - Ping Wang – DNREC Division of Water
  - Martin Willis – Self
- Meeting Summaries
  - [September 11, 2018 Meeting Summary](#)
- Products
  - [Offsets Work Group Charge](#)
  - [Offsets Work Group Initial Scope of Work](#)
  - [Offsets – Draft Options for RAC Review](#)
  - [Draft Coastal Zone Act Offsets Rules and Priorities](#)

## Risk Evaluation and Financial Assurance Work Group

- Membership List (with affiliations)
  - Eileen Butler – DNREC Division of Waste and Hazardous Substances, Tank Management Section
  - Patty Cannon – Department of State, Division of Small Business, Development and Tourism
  - Dave Carpenter – New Castle County, Emergency Management
  - Michael Gould – Department of Insurance
  - Hon. Randy J. Holland – CZCPA RAC Chair
  - Carol Houck – City of Delaware City

- Renee Hupp<sup>2</sup> – Delaware Emergency Management Agency, State Emergency Response Team
- Richard “Dick” Kirk – Retired attorney (private practice)
- Leslie Ledogar – Department of Insurance
- Erich Schuller – DNREC Division of Waste and Hazardous Substances, Emergency Response Team
- Jason Sunde – DNREC Division of Waste and Hazardous Substances, Solid and Hazardous Waste Section
- Robert Whetzel – Richards, Layton & Finger / CZCPA RAC Member
- Jill Williams-Hall – DNREC Division of Waste and Hazardous Substances, Site Investigation and Restoration Section
- Meeting Summaries
  - [September 5, 2018 Meeting Summary](#)
  - [September 19, 2018 Meeting Summary](#)
  - [October 3, 2018 Meeting Summary](#)
  - [October 16, 2018 Meeting Summary](#)
  - [October 30, 2018 Meeting Summary](#)
- Products
  - [Risk Evaluation and Financial Assurance Work Group Charge](#)
  - [DNREC Clarification on the Risk and Financial Assurance Work Group Charge](#)
  - [Risk Evaluation and Financial Assurance Initial Scope of Work](#)
  - [Financial Assurance Technical Background Paper](#)
  - [Example Financial Assurance Regulations \(Louisiana\)](#)
  - [Federal Environmental Laws with Financial Assurance Requirements](#)
  - [Delaware Environmental Regulations with Financial Assurance Requirements](#)
  - [Risk Evaluation and Financial Assurance – Revised Options for RAC Review](#)
  - [Summary Table of Financial Assurance by Risk Event Category](#)
- All-Hands Joint Work Groups Meeting
  - [August 21, 2018 Meeting Summary](#)

## Appendix I: Public Open Houses Documents and Public Feedback Summary

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/czcpaopenhouses](http://de.gov/czcpaopenhouses).

- [CZCPA RAC Open Houses Informational Video](#)
- [CZCPA RAC Preliminary Recommendations Packet](#)
- [Maps of the Delaware Coastal Zone and the 14 Heavy Industry Use Sites](#)
- [Overview Posters](#)
- [Topic #1: Economic Effect Posters](#)
- [Topic #2: Sea Level Rise and Coastal Storms Posters](#)

---

<sup>2</sup> Effective at the October 3, 2018 Risk Evaluation and Financial Assurance Work Group Meeting, Renee Hupp replaced Ed Tyczkowski, as a member of the Work Group. Mr. Tyczkowski had represented the Delaware Emergency Management Agency but left his position at the Agency partway through the Work Group’s proceedings.

- [Topic #3: Environmental Impacts and Offsets Posters](#)
- [Topic #4: Financial Assurance Posters](#)
- [Topic #5: Bulk Product Transfer Facilities Posters](#)
- [Topic #6: Cross-Cutting Issues Posters](#)
- [CZCPA RAC Open Houses Public Feedback Summary](#)

#### Appendix J: Other Key Documents

The hyperlinks below link to the listed documents. These documents can also be accessed via [de.gov/czcpa/rac](http://de.gov/czcpa/rac).

- [Bulk Product Transfer Facilities – Draft Recommendations for RAC Review](#)
- [Sea Level Rise and Coastal Storms – Draft Goals and Questions for Discussion](#)
- [Sea Level Rise and Coastal Storms – Draft Recommendations](#)
- [Cross-Cutting Issues – Revised Proposals for Regulatory Approaches](#)

## Coastal Zone Conversion Permit Act Regulatory Advisory Committee

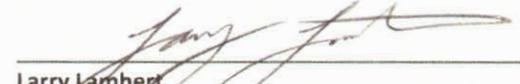
We, the undersigned members of the Coastal Zone Conversion Permit Act Regulatory Advisory Committee, acting as individuals, submit this Final Report relating to the development of regulations governing the administration of Delaware's Coastal Zone Conversion Permit Act.



---

**Jennifer Adkins**

Partnership for the Delaware Estuary  
(designated alternate Joshua Moody)



---

**Larry Lambert**

Claymont Renaissance Development Corporation  
(designated alternate Frances West)

---

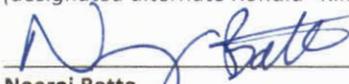
**William Ashe\***

International Longshoremens' Association 1694  
(designated alternate Ronald "Kimoko" Harris)

---

**Awele Maduka-Ezeh\***

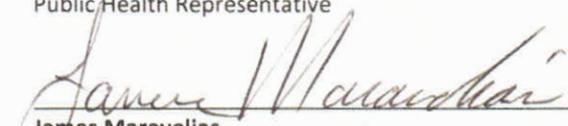
Public Health Representative



---

**Neeraj Batta**

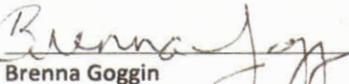
Batta Environmental



---

**James Maravelias**

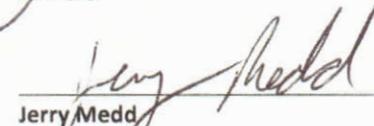
AFL-CIO



---

**Brenna Goggin**

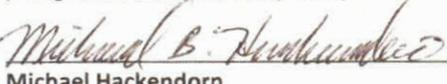
Delaware Nature Society  
(designated alternate Mary Peck)



---

**Jerry Medd**

The Pilots' Association for the Bay & River Delaware  
(designated alternate Jack Hanley)



---

**Michael Hackendorn**

Delaware Building and Construction Trades Council



---

**Jeffrey Richardson**

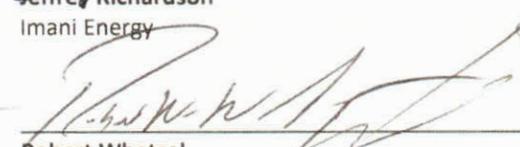
Imani Energy



---

**Ronald Handy, Sr.**

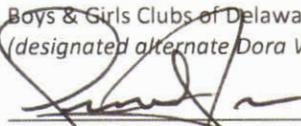
Boys & Girls Clubs of Delaware  
(designated alternate Dora Williams)



---

**Robert Whetzel**

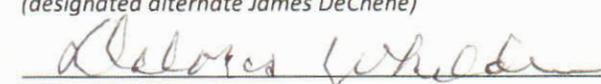
Richards, Layton & Finger Law Firm  
(designated alternate James DeChene)



---

**S. Douglas Hokuf, Jr.**

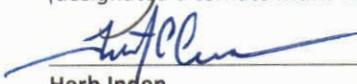
New Castle County  
(designated alternate Mark Wolanski)



---

**Delores Whildin**

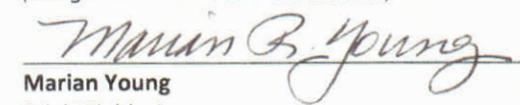
Resident of Claymont  
(designated alternate Brett Saddler)



---

**Herb Inden**

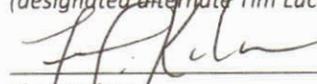
City of Wilmington  
(designated alternate Tim Lucas)



---

**Marian Young**

BrightFields, Inc.  
(designated alternate Kathy Stiller)



---

**Tim Konkus**

Delaware City Marina and Main Street Delaware City, Inc.  
(designated alternate Jeffrey Gordon)



---

**Hon. Randy J. Holland**

Chair, CZCPA RAC

Date: April 16, 2019