

**COASTAL ZONE CONVERSION PERMIT ACT REGULATORY ADVISORY COMMITTEE MEETING #3
AUGUST 21, 2018
MEETING SUMMARY**

APPROVED BY THE CZCPA RAC ON SEPTEMBER 12, 2018

Disclaimer: This meeting summary was prepared by the Consensus Building Institute (CBI), a non-profit entity contracted by DNREC to facilitate CZCPA RAC meetings and draft meeting summaries. This summary is not intended to be a meeting transcript. Rather, it focuses on the main points covered during the meeting without attribution.

MEETING IN BRIEF

At its August 21, 2018 meeting, the Coastal Zone Conversion Permit Act (CZCPA) Regulatory Advisory Committee (RAC) discussed key issues related to its charge to advise the Delaware Department of Natural Resources and Environmental Control (DNREC) on drafting regulations to implement the CZCPA. The RAC reviewed and approved the meeting summary from its July 12 meeting and observed a moment of silence for Dr. V. Eugene McCoy, Jr., a RAC member who passed away in mid-July. The RAC heard presentations on, and discussed the key issues related to, preparing heavy industry use sites for sea level rise and coastal storm impacts and bulk product transfer. DNREC introduced the newly hired technical consultant for the Work Groups: Industrial Economics, Inc. The RAC also heard a presentation on the statutory and regulatory processes for site remediation from contamination. After an opportunity for the public to comment on topics being discussed by the RAC, the meeting closed with a brief discussion of next steps. A list of meeting participants is attached to the end of this summary. Presentation slides are available at de.gov/czcparac.

ACTION ITEMS

Who	What
RAC members	<ul style="list-style-type: none"> • Review materials prior to next RAC Meeting • Observe Work Groups, as desired
DNREC	<ul style="list-style-type: none"> • Post all presentation slides, background materials, and the approved July 12 meeting summary to the CZCPA RAC webpage at de.gov/czcparac. • Post final list of Work Group members and Work Group charges on the CZCPA Work Groups webpage at de.gov/czcpaworkgroups. • Develop information and options on the key issues of sea level rise and bulk product transfer for the RAC to discuss on September 12. • Review bulk product transfer legal issues associated with properties along the Delaware-Pennsylvania border. • Clarify if and how Brownfields Program funds can be used for redeveloping the 14 sites under CZCPA. • Distribute draft August 21 meeting summary to RAC for review (will finalize at September 12 meeting). • Distribute calendar of RAC and Work Group meetings through December 2018. • With CBI, develop draft agenda for September 12 meeting.
CBI	<ul style="list-style-type: none"> • Prepare draft meeting summary. • Draft agenda for September 12 meeting.

UPCOMING MEETINGS AND EVENTS

Event	Date	Venue
RAC Meeting #4	Wednesday, Sept. 12, 2018	DNREC Lukens Drive Office, New Castle
RAC Meeting #5	Tuesday, Oct. 9, 2018	Buena Vista Conference Center, New Castle
RAC Meeting #6	Wednesday, Nov. 7, 2018	DNREC Lukens Drive Office, New Castle
RAC Meeting #7	Tuesday, Dec. 11, 2018	Bellevue Community Center, Wilmington

The most detailed and up-to-date information on upcoming CZCPA meetings and events, including Work Group meetings, is posted on the Delaware Public Meeting Calendar at de.gov/czcpameetings.

DISCUSSION

Below is a summary of key topics discussed during the meeting. All presentation slides are available at de.gov/czcpa/parac.

RAC Business

The June 14 meeting summary was approved by the RAC with no changes. The RAC observed a moment of silence for Dr. V. Eugene McCoy, Jr., a RAC member who passed away in mid-July.

Key Issue: Preparing Sites for Sea Level Rise and Coastal Storm Impacts

Susan Love (DNREC) and Greg Williams (DNREC, State NFIP Coordinator) gave an overview of sea level rise risks in Delaware and in the Coastal Zone, best practices for sea level rise planning, and key questions for the RAC to consider to develop recommendations. The relevant language in the CZCPA states, “An application for a conversion permit... must include... 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.” The RAC will need to provide specific advice to DNREC on these key components:

- **Components of a plan.** Develop a list of components, based upon required county elements and provisions of the state flood risk avoidance guidance document.
- **Potential impacts of sea level rise and coastal storms.** Develop procedure for identifying impacts, based upon county floodplain rules and state guidance.
- **Useful lifespan.** Utilize state flood risk avoidance guidance as a basis for selecting future flood levels to plan for.

Flooding overview

Of the 14 Coastal Zone sites, two sites have no mapped flood risk, five sites are significantly within three feet of the sea level rise inundation area, and 10 sites are significantly within the area inundated by a combination of coastal flooding and sea level rise.

There are many existing land use and development rules and regulations for flooding in Delaware (e.g., state guidance on Flood Risk Avoidance, developed under Executive Order 41 (Gov. Jack Markell)). Delaware and the Federal Emergency Management Agency (FEMA) have also developed a number of interactive maps of the floodplain and sea level rise risks that allow anyone to see projected results for different scenarios.

FEMA's National Flood Insurance Program (NFIP) is a voluntary program under which communities agree to adopt and enforce minimum federal standards. In return, FEMA provides flood insurance to those communities. NFIP maintains and periodically updates its flood insurance rate maps (FIRMs). These maps are used to calculate risk, manage floodplains, and ensure compliance with floodplain ordinances and building codes. The FIRMs for Kent and Sussex Counties were updated in June 2018, and the New Castle County map was last updated in February 2015. There are limitations, however, to the FIRMs, such as: (1) they show an analysis of flood scenarios based on past events and data (i.e., future conditions are not taken into account); (2) they do not account for shoreline erosion, wetland loss, subsidence, relative sea level rise, upland development or degradation of existing flood infrastructure; (3) they do not account for changes in storm climatology (i.e., rainfall frequency and severity) and the effects of multiple storm events.

Few, if any, standards exist for development immediately adjacent to the high risk floodplain or outside mapped floodplains. Approximately 25% of flood damages nationally occur to structures outside the FEMA high risk floodplain.

John Gysling (New Castle County Floodplain Administrator) provided comments and information about the county's floodplain requirements and how they might apply to development on the 14 heavy industry use sites. New Castle County (NCC) does not allow structures to be built in the 100-year floodplain unless approved by the Board of Adjustment as a beneficial use. NCC also does not allow the net filling of the floodplain. The County has various regulations and codes for improving existing structures in the floodplain. These do not, however, address sea level rise. In 2016, NCC received a grant from DNREC to study the sea level rise risk at Port Penn and that report is available at <https://www.nccde.org/1181/Port-Penn-Flood-Study>.

Ms. Love emphasized that many of the 14 sites already have building constraints. Although the CZCPA provides a new avenue for the sites to be redeveloped, the developers would still need to abide by local and state codes. There is a high threshold for building a structure in an existing floodplain unless a developer meets a series of requirements.

Sea level rise overview

Delaware is experiencing a 3.44 mm rise in sea level per year, which is approximately one foot per century. If current greenhouse gas emissions remain the same, the state is projected to see between 0.5 and 1.5m of relative sea level rise by 2100.¹ These projections – particularly the high sea level rise scenario – can be used to guide planning activities in the state. Initial scenario mapping for the Chloramone site, for example, shows the potential for significant inundation due to sea level rise. The state has developed a document called “Avoiding and Minimizing Risk of Flood Damage to State Assets: A Guide for Delaware State Agencies,” as directed by Executive Order 41, which requires state agencies to develop plans and policies for emissions reductions and adaptation and take on-the-ground action to reduce flood risk to state assets. Existing map projections for sea level rise in the state, however, are limited by uncertainty about the compounding effects of wave action, erosion, human activity, and increased precipitation combined with coastal flooding.

¹ Additional detail on sea level rise risk in Delaware can be found in the presentation slides.

Discussion

Comments or questions posed by the RAC in relation to this topic are summarized below. Each question is underlined followed by an answer, if offered.

- Do the existing FEMA guidelines differentiate between residential, commercial, and industrial uses? No, they have one standard for building structures.
- Global datasets show accelerating sea level rise. Are those data sets part of this analysis and maps? Are these projections for Delaware conservative based on the most recent data? These SLR scenarios are based on business as usual (i.e., current emissions levels go up as expected based on past trends). Models do show uncertainty so we could see more sea level rise than these projections show. The state will likely update its sea level rise scenarios regularly so the new conversion permit regulations may need to link back to whatever information the state puts out in the future. The RAC should consider how risk adverse the state should be (e.g., project 1 foot versus 9 feet of sea level rise) when evaluating permit applications.
- How is the Executive Order 41 guidance applied? This guidance is only used for state agencies and state projects built with state dollars. The Executive Order does not address private industry development but could be used as a guide.
- Does the risk calculation consider the value of the infrastructure? It is about risk tolerance for critical buildings. For buildings that are important for residents, we have given guidance but not rules. State agencies do not have a formal process for who makes the final decision. Delaware Department of Transportation has incorporated a lot of this guidance into their work. State-wide, it is mainly ad-hoc for now.
- How does Delaware's adoption of FEMA maps compare to other coastal areas in the U.S. with similar levels of coastal industrial development? Delaware borrowed heavily from Maryland in drafting its own guidance; Maryland has done the best work to date on this subject. Massachusetts and New York also have taken this risk-adverse position for state facilities. We do not think any floodplain maps have yet incorporated sea level rise but there are efforts in some jurisdictions to map future conditions. Political influence may determine whether climate change-related projections are incorporated into their floodplain maps, so it is mostly in Northeast states where regulations are starting to include sea level rise into development guidance.
- Flood insurance will be a piece of the Risk Evaluation and Financial Assurance Work Group's work. Some risks can be managed through insurance and liability.
- If there was an operating facility now on one of the 14 sites, it would be useful to know if the state has a plan for preparing for sea level rise on that site. Who is financially responsible for funding that? If they apply for a Conversion Permit, what would kick in?
- What other climate-related resources are geared towards heavy industry? EPA has programs for climate-ready utilities. What other resources exist for looking beyond building vulnerability (e.g., employee commutes)?
- Does NFIP insure industrial sites the same as communities? It does not. NFIP looks at residential and non-residential structures and provides different level of coverage (\$250,000 for residential and \$500,000 for non-residential). For these 14 heavy industry sites, insurance would probably come from private insurance rather than NFIP. We can look into how industrial insurance is handled.
- I am concerned about the railroad station built in Claymont and how these projections will impact that site. The southbound side of the tracks had a tunnel that flooded in the past. How will

these impacts affect train traffic? The RAC does not have purview over the passenger station in Claymont because it is not on one of the 14 sites. Amtrak recently did a Northeast Corridor assessment looking at sea level rise and flooding, and the corridor is definitely at risk. That plan is available online at <https://www.documentcloud.org/documents/2136439-amtrak-northeast-corridor-climate-change.html>.

- Are any of the 14 sites on the insurance repeat claims list? Some buildings have been on that list, but they have been demolished. None of these 14 sites are now on that list.

Next steps

DNREC staff will develop a document detailing key considerations and potential options for the RAC to discuss at its September 12 meeting.

Key Issue: Bulk Product Transfer

Judy Jordan (DNREC) presented on the current definition, purpose, and intent of the CZCPA on the subject of bulk product transfer (BPT) and raised key questions for the RAC to consider to develop recommendations. Existing regulations define “bulk product” as loose masses of cargo such as oil, grain, gas, and minerals, which are typically stored in the hold of a vessel. Historically, new BPT facilities have been prohibited in the Coastal Zone; Delaware Storage and Pipeline and Ocean Port Industries are the only two heavy industry use sites that were grandfathered in as bulk product transfer facilities. All sites in the Coastal Zone have historically been allowed to bring in bulk products for their own use but were prohibited from sending those products to another site or out of the state. The CZCPA expands the ability to bring bulk products into the Coastal Zone on a limited basis:

- Grain can be imported and exported without limitations. There are no current facilities that import or export grain nor are there any pending requests to do so.
- BPT is still prohibited across state lines, but the CZCPA allows BPT within the Coastal Zone if the products are: (1) necessary for and fully utilized (i.e., used or altered) in the Coastal Zone, or (2) produced by one or more facilities within the Coastal Zone. This piece of the legislation was intended to increase flexibility for industry (e.g., economic gain) without increasing the risk to the state (i.e., the risk of transporting bulk product through the state).

Ms. Jordan presented various BPT scenarios, noting which scenarios would be allowed by the state and what types of Coastal Zone permits would be required.

The provision allowing BPT within the Coastal Zone raises many questions that the RAC will need to help answer, including:

- What documentation is necessary to verify whether bulk products imported are only sent to facilities within the Coastal Zone? Fully utilized in the operation of one or more facilities within the Coastal Zone?
- How can we verify whether bulk products exported are produced by one or more facilities within the Coastal Zone?
- What should the reporting requirements be for bulk product transfer facilities to ensure compliance with the Act?
- What should the reporting requirements be for facilities the import bulk products for their own use?
- What should the reporting requirements be for bulk product grain?

Discussion

Below are the questions posed by the RAC in relation to this topic. Each question is underlined followed by an answer, if offered.

- Can you clarify a site's ability to use a neighboring dock? The CZCPA says bulk product at a newly permitted facility must be used in Delaware's Coastal Zone. An adjacent facility in Pennsylvania would not be able to utilize the dock. This is why DNREC has a status decision process – it gives an early assessment of what permits would be needed for a pre-proposed project.
 - I am interested in the case of Marcus Hook (i.e., the Sun Oil heavy use industry site) on the Pennsylvania/Delaware border. If they built on the Delaware portion, what would be the criteria to apply for a Conversion Permit if bulk product would cross state lines? It depends. The status decision process would be very helpful here. They may not be able to export product that is manufactured in Pennsylvania out of Delaware. We would need to look at such a proposal, but the ability to have bulk product cross state lines is probably very limited.
 - If someone built a dock on their property in Delaware, could it feed back into Pennsylvania where they have a dock? I think this scenario should be looked at. I know there is interest in building at the Marcus Hook Refinery. DNREC will definitely need to look at this. Our primary concern is how we track BPT and what “transforming” a product means. There is probably a legal interpretation for properties that straddle the line. The question would be, “For a property that straddles the line, is the DE side of the property in the CZ for these purposes?”
 - If the dock is in Pennsylvania, DNREC cannot regulate that. A developer may need other permits to build a unit in Delaware, but CZCPA BPT provisions may not be involved if the dock is on the Pennsylvania side.
 - In the statute, BPT addresses only ship-to-shore and ship-to-ship transfers. It does not apply to land-to-land transfers (except for transfers that originated as ship-to-shore and ship-to-ship within the Coastal Zone).
- Can crude oil be imported and used within the Coastal Zone as well as exported? New oil refineries are still prohibited. Corn oil, for example, would need to be transformed in the Coastal Zone to come in or out.
- Is it correct to say that a bulk product has to be transferred or manufactured within the Coastal Zone, not just in Delaware writ large? That is correct. The BPT provisions limit such activities to the Coastal Zone only.

Next steps

DNREC staff will develop a document detailing key considerations and potential options for the RAC to discuss at its September 12 meeting.

Work Groups Overview

Judy Jordan (DNREC) reminded RAC members of the focus areas of the four Work Groups, shared the timeline for Work Groups to conclude their work, and introduced Industrial Economics, Inc. (IEc) as the new technical consultant. Work Groups will meet at least monthly from August to December 2018. They will provide the RAC with technically viable options (regulatory approach and language, where appropriate) in four areas: economic effect, environmental impact, risk evaluation and financial assurance, and offsets. Work Groups are not asked to make recommendations to the RAC about the best option to choose – this is the RAC's responsibility.

The technical consultant will help each Work Group by conducting research, providing technical expertise and guidance, preparing Work Group outputs, and providing technical expertise to the RAC. Mike Donlan, president of IEc, noted in remarks to the RAC that each Work Group will be staffed by an IEc principal with extensive expertise in that field.

A calendar of all RAC and Work Group meeting dates will be posted on the Delaware Public Meeting Calendar. A RAC member noted that the timeline for Work Groups to produce draft products may be overly ambitious despite the importance of the Work Group efforts.

Review: Statutory and Regulatory Processes for Site Remediation

Marjorie Crofts (DNREC Division of Waste and Hazardous Substances) reviewed the federal and state statutes and regulations that guide and oversee remediation on contaminated sites. This presentation was designed to complement the presentation on the clean-up status of the 14 heavy industry use sites from the July 12 meeting.

DNREC's Division of Waste and Hazardous Substances runs three programs relevant to the 14 Coastal Zone sites:

- **Tank Management.** Oversees leaking Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs).
- **Solid and Hazardous Waste Management.** Oversees Resource Conservation and Recovery Act (RCRA) Corrective Action.
- **Site Investigation and Restoration.** Oversees Superfund, Hazardous Site Cleanup Act (HSCA) Enforcement, Voluntary Cleanup Program, and Brownfields.

The 14 heavy industry use sites fall under one of four types of remedial programs: Superfund (2 sites), RCRA Corrective Action (4 sites), Voluntary Cleanup Program (4 sites), and Regulated ASTs (3 sites).

For any planned redevelopment of the 14 sites that would affect the integrity of a previously-completed remedial action (e.g., building on top of capped contamination that cannot support the proposed development without risking its integrity), additional measures may be required to ensure remediation standards are still met. For the case of sites where remedial action has not yet been completed, redevelopment could accelerate the timeline for remediation.

Below are the questions posed by the RAC in relation to this topic. Each question is underlined followed by an answer, if offered.

- Given the RAC's future work on financial assurance, can you tell us which of these programs require financial assurance? Active ASTs/USTs are required to have financial assurance. Under RCRA, the owner of a permit must have financial assurance once the remedy is selected. They are required to maintain that level of financial assurance for 30 years after the site closure or the remedy is implemented.
- Who takes over the liability and cleanup costs for a site when a site is sold? Do they receive brownfields program funds? Brownfields grant monies, which are typically quite limited compared to the full costs of most cleanups, generally create limited liability to allow for purchase and improvement and to support cleanup efforts. However, the new CZCPA statute appears to explicitly foreclose brownfields state grants because the new law states that owners must provide their own cleanup funds. DNREC and DE DOJ can check into this further.

- Who would determine if a capped area at a site could support new development on top of it? The developer would need to hire a consultant to conduct an engineering analysis and then bring that analysis to the Division for us to evaluate.

Next Steps

Patrick Field (CBI) reviewed the next steps in the RAC process and action items (listed on page 1). He noted that RAC meetings will be held from approximately 9am-1pm going forward, but may return to a full-day schedule if necessary. The next RAC meeting will be held on September 12, 2018. DNREC will present options and key questions on sea level rise and bulk product transfer and the RAC will engage in agreement-seeking on priority options and preferences to the extent possible. The four Work Groups will begin meeting in September. This RAC meeting, and all upcoming RAC and Work Group meetings, was and will be open to the public. Before the next meeting, RAC members, DNREC, and CBI should plan to complete the action items detailed on page one of this summary.

Public Comment

Below is a summary of questions and remarks offered during the public comment session.

Bill Dunn (Civic League for New Castle County (NCCCL)): The graph of projections for sea level rise presented during this meeting showed a linear fit for increasing sea level rise. From other research I have seen, it should be an exponential or polynomial fit of the line, showing accelerating sea level rise. I want to know more about the technical aspects of these projections. NCCCL is also concerned that these Work Groups and the RAC do not have enough expertise in process design, chemistry, and other technical aspects of redevelopment work. The final regulations should contain technically-specific requirements for redevelopment applications; this is a high priority for NCCCL.

- DNREC staff noted that the 2017 “Determination of Future Sea-Level Rise Planning Scenarios for Delaware” report available at <https://www.dgs.udel.edu/projects/determination-future-sea-level-rise-planning-scenarios-delaware> gives a more detailed picture of the data used to estimate sea level rise risk for Delaware, and projections are revised periodically. The line is a polynomial curve. DNREC staff also noted that the agency can set guidelines and requirements but technical elements will vary by facility. The final regulations will require enough information from applicants for DNREC to make a decision on an application.

Adjournment

The RAC Chair, Justice Randall Holland, adjourned the RAC at approximately 12pm. An orientation meeting for all RAC Work Group members was held from 2-4pm; a brief summary of this meeting can be found at de.gov/czcpaworkgroups.

APPENDIX A: PARTICIPANT LIST

RAC members (and designated alternates sitting in for RAC members)

Name	Affiliation
Jennifer Adkins	Partnership for Delaware Estuary
Neeraj Batta	Batta Environmental
Brenna Goggin	Delaware Nature Society
Michael Hackendorn	Delaware Building and Construction Trades Council
Ronald "Kimoko" Harris (Designated Alternate for William Ashe)	International Longshoreman's Association 1883
S. Douglas Hokuf, Jr.	New Castle County
Hon. Randy J. Holland	Chair, CZCPA RAC
Tim Konkus	Delaware City Marina and Main Street Delaware City, Inc.
Tim Lucas (Designated Alternate for Herb Inden)	City of Wilmington
James Maravelias	AFL-CIO
Jerry Medd	Pilots' Association for the Bay and River Delaware
Jeffrey Richardson	Imani Energy
Kathy Stiller (Designated Alternate for Marian Young)	BrightFields, Inc.
Robert Whetzel	Richards, Layton & Finger
Dora Williams (Designated Alternate for Ronald Handy, Sr.)	New Castle Prevention Coalition
Delores Whildin	Resident of Claymont

DNREC staff and other state employees

Name	Affiliation
James Brunswick	Delaware DNREC
Patty Cannon	Delaware DOS DSB
Marjorie Crofts	Delaware DNREC
Sierra Davis	Delaware DNREC
Dirk Durstein	Delaware DOJ
Judy Jordan	Delaware DNREC
Todd Keyser	Delaware DNREC
Brittany Klecan	Delaware DNREC
Susan Love	Delaware DNREC
Bob Palmer	Delaware DNREC
Bob Scarborough	Delaware DNREC
Lori Spagnolo	Delaware DNREC
Jason Sunde	Delaware DNREC
Jameson Tweedie	Delaware DOJ

Ping Wang	Delaware DNREC
Greg Williams	Delaware DNREC
Ian Yue	Delaware DNREC

Facilitation team

Name	Affiliation
Patrick Field	Consensus Building Institute
Rebecca Gilbert	Consensus Building Institute

Members of the public (including designated alternates not sitting in for RAC members)

Name	Affiliation
Matt Brill	Self
Mike Donlan	Industrial Economics
Bill Dunn	Civic League for New Castle County
John Gysling	New Castle County
Paul Morrill	The Committee of 100
Mary Peck (Designated Alternate for Brenna Goggin)	Delaware Nature Society
Angelique Rodriguez	Delaware LECET
Kris Saum	TRC Solutions, Inc.
David Swayze	Parkowski, Guerke & Swayze
Mark Wolanski (Designated Alternate for S. Douglas Hokuf, Jr.)	New Castle County