Offsets Work Group
Draft Options for RAC Review

November 7, 2018

Initial Scope Issue #1 Strawman: Options for Ensuring that Offset Proposals "More than Offset" the Facility's Negative Environmental Impacts

Summary Overview: The CZCPA statute requires offsets to "more than offset" environmental impacts. Four options for addressing this requirement are provided below.

Options: The RAC could address this issue by:

- *Option #1: Make the Case.* Allowing the applicant to make the case that its offset proposal more than offsets anticipated environmental impacts, however it chooses;
- *Option #2: Permit Limits*. Base offsets on permit limits, which reflect maximum allowable emissions.
- *Option #3: Fixed Percentage.* Require offsets to exceed impacts by a standard percentage.
- *Option #4: Hybrid.* Allow and prioritize a combination of some or all of the previous options.

Option #1: Make the Case

Pros	Cons
• Allowing the applicant to make the case that its offset proposal more than offsets anticipated environmental impacts maximizes flexibility in the CZCPA offset development process.	• Lack of a "standardized" approach might increase administrative effort and complexity. • Regulatory uncertainty for the applicant.

Option #2: Permit Limits

Pros	Cons
• Administrative simplicity. • Work Group discussion suggests that facilities generally operate well below permit limits, making this approach consistent with the CZCPA"s "more than offset" requirement. • If applicant exceeds permit limits, existing laws and regulations address the issue through penalties, corrective action and/or other mechanisms.	• Because permits do not necessarily address all environmental impacts (e.g., noise, aesthetics, some natural resource impacts, etc.), this approach may only be feasible for a subset of impacts identified in a CZCMA permit application.

Option #3: Fixed Percentage

Pros	Cons
• Identifying one or more standard factors by which offsets must exceed impacts provides administrative simplicity and certainty for the applicant.	• Applying a single, standard factor to ensure that offsets exceed environmental impacts might be overly rigid, insufficiently reflective of case-specific situations. • Developing a defensible basis for use of one or more standard "factors" can be difficult, and might require significant administrative effort.

Option #4: Hybrid

Pros	Cons
• Provides an opportunity to tailor regulations in a way that maximizes pros and minimizes cons through some combination of individual options identified above. • Ensures inclusivity of all environmental impacts, whether permitted or not.	• Combining options potentially increases administrative complexity and effort.

Additional Information

- Potential verification of offset benefits is relevant to all options identified above, and addressed in a separate Issue Paper (#7).

Initial Scope Issue #2 Strawman: Options for ensuring that offset proposals sufficiently address negative environmental impacts "on an annual basis"

Summary Overview: The CZCPA statute requires offsets to address impacts "on an annual basis." Four options for addressing this requirement are provided below.

Options: The RAC could address this issue by:

- *Option #1: Upfront Cumulative Estimate*. Require that estimated impacts and offset benefits are summed over time up front during permit review. Ensure that offsets are sufficient to address anticipated cumulative impacts over the life of the project.[1]

- *Option #2: Monitoring*. Require monitoring of actual impacts and offset benefits over time. "One-time" offset project verification could be considered for offsets that address "non-recurring" impacts. Periodic monitoring could be considered for offsets that address "recurring" or ongoing impacts, with associated adjustments to offset requirements if warranted.

- *Option #3*: *Permit Limits*. Base offsets on permit limits that reflect maximum allowable emissions over permit-specified time periods.

- *Option #4*: *Hybrid*. Allow and prioritize a combination of some or all of the previous options.

Option #1: Upfront Cumulative Estimate

Pros	*Cons*
• Estimating and summing impacts and offset benefits over time has precedent in other regulatory contexts, and can facilitate resolution of offset requirements during the permit application process. • Might be particularly well suited to address non-recurring, discrete impacts (e.g., impacts associated with facility construction).	• Future forecasts of environmental impacts and offset benefits over long time periods (e.g., decades) can be subject to large uncertainties. • Does not provide a mechanism for measuring actual offset benefits or assessing the potential need for offset adjustments in the future.

[1] This option assumes that cumulative summation of impacts over time is sufficient to address the CZCPA statutory requirement to address impacts on an "annual basis."

Option #2: Monitoring

Pros	Cons
• More likely to ensure a match between impacts and offsets over time.	• Monitoring requirements add expense and complexity. • For periodic monitoring, monitoring frequency needs to be addressed (see Issue Paper #6). • Who conducts monitoring and verification of monitoring information need to be addressed (see Issue Paper #7).

Option #3: Permit Limits

Pros	Cons
• Administrative simplicity. • Relies on monitoring required by and compliance mechanisms associated with other permit(s) to ensure that contaminant releases remain at or below levels used to establish offset requirements.	• Because permits do not necessarily address all environmental impacts (e.g., noise, aesthetics, some natural resource impacts, etc.), this approach may only be feasible for a subset of impacts identified in a CZCPA permit application. • Depending on offset projects selected, some additional monitoring may be required to confirm actual offset benefits. • Permit limits may not specifically reflect annual time periods.

Option #4: Hybrid

Pros	Cons
• Provides an opportunity to tailor regulations in a way that maximizes pros and minimizes cons through some combination of individual options identified above.	• Combining options potentially increases administrative complexity and effort. • Regulatory uncertainty for the applicant.

Additional Information

- Collaboration with the Environmental Impact WG on this topic likely would be beneficial. The RAC should consider requiring the applicant to explicitly identify key assumptions underlying any estimates of environmental impacts and offset benefits over time, and the basis for those assumptions.

- Depending on options recommended by the RAC, CZCPA regulations may need to incorporate a process for updating offset requirements over time based on monitoring results.

Initial Scope Issue #3 Strawman: Options for ensuring that offset proposals "favor offsets that directly benefit Delaware"

Summary Overview: The CZCPA statute requires that the offset process "favors offsets that directly benefit Delaware." Two options for addressing this requirement are provided below.

Options: The RAC could address this issue by:

- *Option #1: Geographic Limits.* Limit where offset projects can take place (e.g., within DE, within DE coastal areas, within the same county as the impact occurs, etc.). Geographic limits could be placed on all offsets or a portion of offsets (e.g., at least 25% of offset expenditures must be in the municipality where impacts occur).

- *Option #2: Make the Case.* Provide the applicant with offset project location flexibility, subject to sufficient demonstration that project benefits will accrue to Delaware.

Option #1: Geographic Limits

Pros	Cons
• Limiting offset project locations to locations within portions of Delaware specified by regulation provides administrative simplicity. • Depending on geographic limits chosen by the RAC, this option could prohibit offset project locations considered by the RAC to be "too distant" from impacted areas. • Would provide a means to potentially address environmental justice impacts and concerns.	• To the extent offset project locations are limited to specified portions of Delaware, preferred offset project types might not available, or might be substantially be more costly or otherwise less preferable than potential projects in other locations.

Option #2: Make the Case

Pros	Cons
• Focusing on applicant demonstration that offset projects benefit Delaware rather than the actual location of offset project maximizes locational flexibility for meeting offset requirements, potentially resulting in more cost-effective projects that can meet the statutory requirement.	• Maximizing locational flexibility can result in projects that "directly benefit Delaware" but with more uncertain benefits to local populations and natural resources and potentially a greater administrative burden related to evaluation of applicant modeling or other analyses to confirm benefits to Delaware.

	• This approach also can lead to substantially different offset project locations for different applicants. Offset projects may occur at locations considered to be "distant" from impacted areas by some stakeholders (including out of state). • These cons potentially could be minimized, at least in part, by regulatory requirements that require offset project(s) that directly benefit local populations and/or requiring more offsets the further away the project is from impacted areas.

Additional Information

- If the RAC chooses to limit offset project location, it will need to determine at what geographic scale to do so in the regulations. If the RAC chooses to express a regulatory "preference" for offsets projects near impacted areas, it should consider providing regulatory language or guidance for operationalizing that preference. If the RAC chooses to provide offset project locational flexibility subject to a demonstration that project benefits will accrue to Delaware, the RAC should consider how best to address potential regulator technical review needs and increased administrative burdens.

- Although the statute requires that the offset process "favors offsets that directly benefit Delaware" stakeholders have expressed a concern that local communities have a voice in offset project decision-making. That concern could be addressed at least in part through options identified for this issue and/or through other elements of the regulatory process (e.g., public review and comment).

- For a small number of substances/impacts, existing programs for the purchase of environmental credits could be appropriate to offset application-specific impacts, subject to applicant demonstration that any such credits directly benefit Delaware and otherwise conform to any geographic limits established by the RAC.

Initial Scope Issue #8[2] Strawman: Options for Offset Flexibility to Address Environmental Impacts

Summary Overview: A key offset program design issue is the extent to which applicants are allowed some measure of flexibility to propose offset projects that address similar impacts, other impacts of importance to local stakeholders, etc.

Options: The RAC could address this issue by:

- *Option #1: No Substitution.* Recommend that offsets address the same substance emitted (for "emissions-based" impacts) or type of impact (for "receptor-based" impacts such as degraded habitat, injured biota, etc.);

- *Option #2: Flexible Nexus.*

    - For "emissions-based" impacts, allowing applicants to propose (and justify) offset projects that address other substances with a similar toxicity profile. To provide additional flexibility, adjustment factors potentially could be used to address differences in toxicity profiles between emitted substance and substance addressed through offset project.

    - For "receptor-based" impacts, allowing applicants to propose (and justify) offset projects that indirectly benefit the affected receptors (e.g., creation of an oyster reef that provides forage for birds impacted by a proposed CZCPA activity), or address other environment-related needs of affected populations (build/refurbish a park for neighborhood residents affected by increased traffic).

- *Option #3 Cost-Based Substitution ("Fee in-Lieu").* Requiring that applicants provide estimates of the cost required to offset the same impact identified in the CZCPA permit application, but instead of undertaking such offset projects make a monetary contribution to a third party or fund used to finance offset projects that reflect local stakeholder priorities with some nexus to CZCPA-related environmental impacts.

Option #1: No Substitution

Pros	Cons
• Administratively simple. • Offsets clearly and directly address environmental impacts.	• Required offset projects may not be feasible, cost-effective, provide the greatest overall environmental benefit, and/or reflective of stakeholder priorities (particularly local stakeholders).

[2] Issue paper numbering has been simplified for ease of use; this issue paper corresponds to Initial Scope Issue originally numbered 5.

Option #2: Flexible Nexus

Pros	Cons
• Flexibility can increase the likelihood of identifying offset projects that are cost-effective and/or more reflective of stakeholder priorities (particularly local stakeholders).	• For "emissions-based" impacts, the expertise, complexity and effort for the applicant and DNREC to evaluate similarity of toxicity profiles and/or adjustment factors if needed. Such analyses can be challenging and time consuming. • For "receptor-based" impacts, the expertise, complexity and effort for the applicant and DNREC to evaluate nexus sufficiency. Such analyses can be challenging and time consuming. • If flexibility is utilized, the actual emissions/environmental impacts identified in the permit application may not be addressed by offset projects.

Option #3: Cost-Based Substitution ("Fee in-Lieu")

Pros	Cons
• Simplification of CZCPA process for the applicant – Applicant contributes specified monetary amounts and does not need to engage in offset project identification process. • Maximizes the ability to fund offset projects that reflect stakeholder environmental priorities (particularly local stakeholders) and to potentially combine smaller individual projects into a single, larger project.	• Process, expertise and effort needed by DNREC to provide verification of applicant cost estimates for directly addressing substances/environmental impacts identified in permit application. • It can be difficult to establish sufficient nexus between environmental impact and the project(s) eventually funded by the applicant's monetary contribution. • Administrative complexity of providing monetary contributions to a third party or fund and potential tracking/auditing needs.