

CZCPA Risk Evaluation and Financial Assurance Work Group

Initial Scope Issue #1 Strawman: Standard Financial Assurance Instruments

Summary Overview: The attached table identifies the different types of financial instruments commonly considered for use in a financial assurance context, provides a brief description of each instrument, identifies pros and cons, and identifies the federal programs that make use of them and the extent to which they are used to address compensatory damages and/or third party liability.

Financial Instrument	General Description	Pros	Cons	Alignment with Federal and State FA Regulations
Trust Fund	A grantor (owner/operator) transfers funds equal to the current cost estimate to a trust fund. The Trustee (financial institution) administers the trust for its designated purpose on behalf a designated beneficiary (regulator). It provides annual valuation statements to the Beneficiary. Funds are immediately available to the Regulator. The Trustee charges fees for administrative services	<ol style="list-style-type: none"> 1. Funds are immediately accessible. 2. Owner/operator no longer has direct access to the corpus of the trust without beneficiary approval. 3. Activities can be reimbursed to the owner/operator for approved activities. 4. Some trusts allow owner/operator to direct investments of the Trust. 5. Generally self-implementing, requires minimal regulatory oversight. 6. Generally best for long-term activities 7. If fully funded, can be an effective instrument in the event of owner/operator default as funds are immediately available to the regulator. 	<ol style="list-style-type: none"> 1. Unless the trust realizes a rate of return equal to or greater than the rate of inflation, the corpus of the trust can erode over time. 2. Can be prohibitively expensive to the owner/operator, especially if the owner/operator is not allowed a pay-in period. 3. Unless/until the trust is fully funded, any withdrawal of principal balance ahead of schedule may yield insufficient funds for future activities. 	<p style="text-align: center;"><u>FEDERAL</u></p> <p>RCRA Subtitle C (HzTSDs), RCRA Subtitle D (SWMUs), RCRA Subtitle I (UST) SMCRA (Mining), CERCLA, SDWA (UIC), TSCA</p> <p>Compensatory Damages</p> <p>Established templates available</p> <p style="text-align: center;"><u>STATE</u></p> <p>DE UST DE AST DE Haz Waste DE Solid Waste</p> <p>Established templates available</p>
Letter of Credit	A document issued by a financial institution that guarantees payment of a customer's (owner/operator's) obligations up to a stated amount for a specified period of time. Requires the use of	<ol style="list-style-type: none"> 1. Funds are immediately accessible. 2. Once the LOC is called, and poured into the Standby Trust Fund, the owner/operator no longer has direct access to the funds without beneficiary approval. 	<ol style="list-style-type: none"> 1. Unless the LOC has an auto update provision increasing the face value for changes in inflation annually, the face value may not reflect actual purchasing power at the time of draws. 	<p style="text-align: center;"><u>FEDERAL</u></p> <p>RCRA Subtitle C (HzTSDs), RCRA Subtitle D (SWMUs), RCRA Subtitle I (UST) SMCRA (Mining), CERCLA, SDWA</p>

Financial Instrument	General Description	Pros	Cons	Alignment with Federal and State FA Regulations
Letter of Credit (cont.)	a Standby Trust Fund, wherein the stated beneficiary is the regulator.	<ol style="list-style-type: none"> 3. Activities can be reimbursed to the owner/operator for approved activities. 4. LOCs should be evergreen (auto-renewed) and irrevocable. 5. Generally self-implementing, requires minimal regulatory oversight. 6. Generally best for short- to medium-term activities 	<ol style="list-style-type: none"> 2. Expense ratio is dependent on company financial health. Can be expensive to the owner/operator, if the owner/operator is in poor financial health, and is required to post collateral equal to the face value of the instrument. 3. The terms and conditions of the LoC will dictate survivability of the instrument in bankruptcy. 4. Not appropriate for long-term activities. 	<p>(UIC), TSCA</p> <p>Established templates available</p> <p style="text-align: center;"><u>STATE</u></p> <p>DE UST DE AST DE Haz Waste DE Solid Waste</p> <p>Established templates available</p>
Surety Bond	The Surety provides its financial backing to the Principal (owner/operator) and guarantees the Principal's obligations up to the penal sum of the bond. While the Principal is primarily responsible, if the Principal defaults on its obligations, as described in the bond, the Surety assumes responsibility for payment. The Surety will pursue reimbursement from the Principals. Surety bonds can be performance or financial guarantee (payment). If financial guarantee, a standby trust generally is established into which the Surety pours funds for use by the Obligee (the regulatory)	<ol style="list-style-type: none"> 1. Funds are immediately accessible, as long as certain provisions are met consistent with the requirements of the bond. Particular attention needs to be paid to bond details. 2. In general, only the obligee can direct draws on the bond consistent with the terms of the bond for obligations approved thereunder. 3. Generally self-implementing, requires minimal regulatory oversight as long as the fundamentals of the bond cover the breadth of activities desired by the regulator. 4. Generally best for short- to medium-term activities, and well-defined environmental activities. 	<ol style="list-style-type: none"> 1. Availability tends to be a function of the breadth of obligations covered and intended coverage period (i.e., time). 2. Expense ratio is dependent on company financial health. Can be expensive to the owner/operator, if the owner/operator is in poor financial health, and is required to pay premiums equal to the PV of the future expected stream of costs. 3. Market accessibility of surety bonds is constrained for certain environmental activities. 	<p style="text-align: center;"><u>FEDERAL</u></p> <p>RCRA Subtitle C (HzTSDs), RCRA Subtitle D (SWMUs), RCRA Subtitle I (UST) SMCRA (Mining), CERCLA, SDWA (UIC), TSCA</p> <p>Third-Party Liability</p> <p>Established templates available</p> <p style="text-align: center;"><u>STATE</u></p> <p>DE UST DE AST DE Haz Waste DE Solid Waste</p> <p>Established templates available</p>

Financial Instrument	General Description	Pros	Cons	Alignment with Federal and State FA Regulations
Insurance	Contract between two parties, whereby the Insurer agrees to pay, on behalf of the Policyholder (owner/operator) for claims made against the policy. In general, such claims are made with the authorization of the named insured (the beneficiary).	<ol style="list-style-type: none"> 1. Funds are immediately accessible, as long as certain provisions are met consistent with the requirements of the insurance policy, including all endorsements and exclusions. Particular attention needs to be paid to plan details. 2. Requires regulatory oversight to the extent partial claims are made against the policy for approved environmental activities 3. Generally best for short- to medium-term activities, and well-defined environmental activities that fall within standard policy coverages. 	<ol style="list-style-type: none"> 1. Availability tends to be a function of the breadth of obligations covered and intended coverage period (i.e., time). 2. Exclusions or endorsements can limit regulator access to insurance coverages. Regulator should ensure that activities identified by the regulator qualify as covered activities under the insurance policy. 3. Expense ratio is dependent on company financial health. Can be expensive to the owner/operator, if the owner/operator is in poor financial health, and is required to pay premiums equal to the PV of the future expected stream of costs. 4. Market accessibility of insurance is constrained for certain environmental activities. 5. Can be burdensome for the regulator if the span of coverages is extensive, and the policy is claims reimbursement upon approval of the regulator. 6. Insurance is a contract between the insurer and the insured for the benefit of the regulator. 	<p style="text-align: center;"><u>FEDERAL</u></p> <p>RCRA Subtitle C (HzTSDs), RCRA Subtitle D (SWMUs), RCRA Subtitle I (UST) SMCRA (Mining), CERCLA, SDWA (UIC), TSCA</p> <p>Third-Party Liability</p> <p>Established templates available</p> <p style="text-align: center;"><u>STATE</u></p> <p>DE UST DE AST DE Haz Waste DE Solid Waste</p> <p>Established templates available</p>

Financial Instrument	General Description	Pros	Cons	Alignment with Federal and State FA Regulations
Insurance (cont.)			<ol style="list-style-type: none"> 7. Insurance companies can cancel policies, add exclusions or otherwise change plan terms in ways that reduce its effectiveness/sufficiency as a financial assurance instrument. The regulator should ensure that it receives advance notification of policy cancellation or policy changes and reviews all exclusions/endorsements carefully. 8. In bankruptcy, the regulator may need to make premium payments to avoid cancellation of the policy. 	
Liquid Instruments	<p>The Principal (owner/operator) provides the <i>liquid</i> instrument to the Regulator. The instrument is held as an offset to the Principal's obligations. Liquid instruments generally include: Cash, check, escrow accounts, CDs, Treasury/Municipal bonds.</p>	<ol style="list-style-type: none"> 1. Readily available funds 2. Generally best for very short-term, clearly-defined activities by owner-operators with very low chances of default. 	<ol style="list-style-type: none"> 1. If not carefully structured, the liquid instrument may be cashed out or canceled by the Principal prior to forfeiture. 2. At the state-level, there is the concern of Miscellaneous Receipts Act provisions. 3. Likely inappropriate for long-term activities, especially if there is concern about owner-operator default down the road. 	<p style="text-align: center;"><u>FEDERAL</u> SMCRA (Mining)</p> <p style="text-align: center;"><u>STATE</u> DE UST (local gov only) DE AST (local gov only)</p>
Self-Insurance	<p>The owner/operator provides certification of a Corporate Financial Test (with, in some instances, a Corporate Guarantee). The certification entails compliance with an array of financial metrics, as well as financial reporting</p>	<ol style="list-style-type: none"> 1. Provides maximum flexibility to the owner/operator in so far as funds are not set aside in a dedicated account, nor is the owner/operator required to set aside an environmental reserve. 2. Owner/operator (or guarantor) assumes 	<ol style="list-style-type: none"> 1. In general, regulator does not have direct access to funds. 2. Generally best for short- to medium-term activities, wherein the owner/operator has demonstrated financial strength. 	<p style="text-align: center;"><u>FEDERAL</u> RCRA Subtitle C (HzTSDs), RCRA Subtitle D (SWMUs), RCRA Subtitle I (UST) SMCRA (Mining), CERCLA, SDWA (UIC), TSCA</p>

Financial Instrument	General Description	Pros	Cons	Alignment with Federal and State FA Regulations
Self-Insurance (cont.)	requirements.	responsibility for payment of all covered activities in the amounts and timing required.	3. Past financial performance is not a guarantee of future financial performance, and availability of funds.	Third-Party Liability Established templates available <p style="text-align: center;"><u>STATE</u></p> DE UST DE AST DE Haz Waste DE Solid Waste Established templates available

Additional Information

-For all financial assurance instruments, regulators need to consider building in mechanisms to update covered amounts to address inflation and/or other changes in costs if covered events occur.

-Cited Federal and DE regulations reflect versions of regulations in force as of October 24, 2018.

CZCPA Risk Evaluation and Financial Assurance Work Group

Initial Scope Issue #2 Strawman: Options for Identifying Existing Financial Assurances at a Site

Summary Overview: The Work Group (WG) believes that conversion permit financial assurance should avoid duplicating existing financial assurances (FA) applicable to the site and address only those elements where existing coverage is absent or insufficient for Delaware’s needs. The WG recommends that the RAC consider including a requirement in the conversion permit regulations for applicants to identify existing financial assurance relevant to a site.

Options: The RAC could address this issue by:

- *Option #1: Disclose all Site FA.* Requiring applicants to identify all existing financial assurance related to the site;
- *Option #2: Disclose CZCPA-related FA.* Requiring applicants to identify only financial assurances associated with portions of the site/activities involved with the proposed converted/new use; or
- *Option #3: Flexible Disclosure.* Allowing applicants to choose what FA information to provide, based on their judgment of what the Secretary of DNREC would need to make a conversion permit decision (with the DNREC having the ability to request more information).

Option #1: Disclose all Site FA

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • Some issues/risks to be considered as part of the CZCPA process (e.g., sea level rise) might, by their nature, be relate to the entire site. • Disclosure of all FA related to a site is not likely to be burdensome to the applicant. • Applicants may want to identify all existing FA at the site, as that information may help minimize additional FA required for the conversion permit. 	<ul style="list-style-type: none"> • For some applicants, portions of a site and/or some site activities may have nothing to do with the proposed converted/new use. Extraneous information should not be required by the CZCPA process.

Option #2: Disclose CZCPA-related FA

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • Focuses on information most relevant to the CZCPA process. 	<ul style="list-style-type: none"> • DNREC may not agree with applicant judgment about portions of the site/activities relevant to the CZCPA process.

Option #3: Flexible Disclosure

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • Provides application-specific flexibility to tailor FA information provided. • DNREC can require additional information, if needed. 	<ul style="list-style-type: none"> • DNREC does not receive a “standard” set of information for each application, which may complicate evaluation. • May increase the likelihood of “back and forth” communication between DNREC and the applicant regarding FA information, which may add time to the conversion permit application process.

Additional Information: To the extent Options 1 and/or 3 are utilized by the RAC, for evaluation purposes it would be helpful to have applicants identify “CZCPA-related” financial assurance in one part of the application and “other site-related” financial assurance in a following part. If the RAC requires applicants to provide information about existing financial assurance relevant to a site and site activities (or a portion thereof), the WG suggests that the RAC consider specifying minimum information requirements about each relevant financial insurance instrument, such as:

- Type of instrument
- Issuing financial institution
- Face value
- Expiration date/time period
- Regulatory authority/reason for which the instrument was obtained
- Conditions under which the instrument may be accessed
- Conditions under which the instrument may be canceled
- All named beneficiaries

Risk Evaluation and Financial Assurance WG

Initial Scope Issue #3 Strawman: Potential Approaches to Different CZCPA-relevant Categories of Actions/Incidents

Summary Overview: Potential approaches for addressing different CZCPA-relevant categories of actions/incidents are summarized below.

Risk	Description	Process	FA Amount	Allowable FA Instruments
Actions to address existing site contamination	This category is specifically identified in CZCPA statutory language. Through a combination of existing and potential conversion permit FA, DNREC needs to be able to access sufficient funds to address contamination currently present at the site in the event the owner/operator is unwilling or unable to do so.	CZCPA applications should identify actions, and associated FA, to address current site contamination (see Initial Scope Issue #2). DNREC should conduct application-specific evaluations of the sufficiency of existing FA, coordinating with other state and federal personnel familiar with the site.	The need for and amount of conversion permit FA will need to 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.	Options for RAC consideration include: a) allowing the full range of FA instruments without restriction, or b) limiting the range of acceptable FA instruments based on site-specific circumstances (see Initial Scope Issue Paper #1).
Actions needed to minimize environmental damage and stabilize and secure the site “upon termination, abandonment or liquidation” of site activities.	This category is specifically identified in CZCPA statutory language. Through a combination of existing and potential conversion permit FA, DNREC needs to be able to access sufficient funds to shut down the site in a manner that minimizes environmental damage and stabilizes/secures the site if the owner/operator is unable or unwilling to do so.	A “concept plan” of action(s) must be submitted with the conversion permit application (see Initial Scope Paper Issue #4), 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	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.	Options for RAC consideration include: a) allowing the full range of FA instruments without restriction, b) allowing the same set of FA instruments as those used to address site closure and post-closure under DE Hazardous Waste regulations but assessing whether there are components of these FA instruments that should be tailored to the needs of conversion permits, or c) limiting the range of acceptable FA instruments based on site-specific circumstances (see Initial Scope Issue Paper #1).
Actions to address future incidents resulting in	This category is specifically identified in CZCPA statutory language. Regulatory language should explicitly recognize	Any approved permit should include language stating that FA will be required to address site-specific actions to address	Face value should be equal to the estimated cost of specified actions to minimize environmental	Options for RAC consideration include: a) allowing the full range of FA instruments, without restriction, or b)

Risk	Description	Process	FA Amount	Allowable FA Instruments
environmental contamination	DNREC’s ability to require future FA associated with specific actions to address an environmental contamination incident in the event the owner/operator is unable or unwilling to undertake such actions.	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.	damage, including DNREC oversight/administration costs. The face value should be downward adjusted to the degree existing FA covers such actions.	limiting the range of acceptable FA instruments based on site-specific circumstances (see Initial Scope Issue Paper #1)
Enhanced emergency response during future environmental contamination incidents	While the CZCPA statute makes reference to minimizing environmental damage associated with future environmental contamination incidents, it does not specifically mention enhancement of DE emergency response capabilities. The RAC might consider reasonable FA to enhance such capabilities.	Applications would need to include FA for this purpose, which would need to be approved by DNREC.	If this type of FA is required, options for RAC consideration include: a) determining appropriate amounts on an application-specific basis, or b) identifying a specific FA amount applicable to all Applicants.	TBD, if the RAC pursues FA for this activity.
Third-party liability and compensation	Third-party liability and compensation is not specifically identified in CZCPA statutory language. The RAC may choose to consider requiring third-party liability and compensation FA to address potential environmental contamination incidents arising from activities undertaken by the permit applicant during site conversion, operations, and post-operation activities in the event the site owner/operator is unable or unwilling to do so.	The RAC might consider whether any approved permit should include language stating that additional FA will be required to address third-party liability risks. If so, the amount of FA should be determined at the time of permit application and be downward adjusted to reflect the nature and amount of pre-existing FA available to meet third-party liability and compensation. DNREC should be mindful that other existing state/federal requirements may affirmatively require FA for third-party liability and	Options include: a) requiring FA for third-party liability and compensation comparable to that required under other DE statutes/regulations for environment-related incidents (e.g., require documentation of FA of at least \$1 million per environmental incident occurrence and at least \$2 million annual aggregate, with coverage limited to bodily injury and property damage); or b) requiring FA for third-party liability based on other, to be	Options for RAC consideration include: a) allowing the full range of FA instruments without restriction, b) limiting the range of acceptable FA instruments based on site-specific circumstances, c) requiring third-party liability and compensation FA through a rider/endorsement under the site applicant’s general liability insurance policy.

Risk	Description	Process	FA Amount	Allowable FA Instruments
		compensation pursuant to other regulatory authorities.	determined, individual/ aggregate annual coverage limits and covered impacts.	
Site improvements to address sea level rise and coastal storms	<p>While CZCPA statutory language requires applicants to 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 statute does not specifically address FA related to such actions.</p> <p>Options for addressing FA for this risk category if the RAC chooses to do so: a) require FA to maintain any site enhancements made to minimize potential impacts from sea level rise/coastal storms, b) provide some type of FA “credit” against other conversion permit FA requirements to encourage enhancements that minimize potential future damage from sea level rise/coastal storm impacts, or c) other?</p>	TBD	TBD	TBD

Additional Information:

- The Work Group has been advised by DE DOJ attorneys that the CZCPA does not support setting up a public-private partnership (a specific type of FA approach considered during Work Group discussions). For such a public-private partnership there must be a clear statutory authorization, of which there is none in the CZCPA context.

CZCPA Risk Evaluation and Financial Assurance Work Group

Initial Scope Issue #4 Strawman: Options for Development of a Concept Plan for Minimization of Environmental Damage and Securing/Stabilizing the Site

Summary Overview: The CZCPA statute requires Applicants to submit a concept and final plan, subject to DNREC approval, for minimizing environmental damage and stabilizing and securing the site in the event of an environmental contamination incident or upon termination, abandonment, or liquidation of activities at a heavy industry site.

Options: The RAC could address this issue in one of two ways:

- *#1 Make the Case*: Providing the applicant with flexibility to develop a site-specific plan that meets the overall statutory objective, without identifying explicit requirements or guidance for plan content or organization; or
- *#2 Adapt Plan Content/Structure from Comparable Programs*: Defining plan content and/or structure based on similar plans required by other regulations (e.g., Spill Prevention, Control, and Countermeasure [SPCC] Plans or Facility Response Plans [FRPs]).

Option #1: Make the Case

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • Maximizes applicant flexibility with respect to concept plan development. 	<ul style="list-style-type: none"> • Plans may vary substantially in format and/or content between applications, which may complicate evaluation.

Option #2: Adapt Plan Content/Structure from Comparable Programs

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • May avoid “reinventing the wheel” if good plan examples from other programs can be found and adapted to meet CZCPA needs. • Specifying concept plan content/structure may reduce uncertainty for applicant. 	<ul style="list-style-type: none"> • Adapting Plan “models” from other programs may prove challenging, given their different regulatory objectives, and require substantial additional effort.

CZCPA Risk Evaluation and Financial Assurance Work Group

Initial Scope Issue #6 Strawman: Ensuring DNREC Has Access to Financial Assurance Expertise and/or Third-Party Verification

Summary Overview: Conversion permit decision-makers may not have the internal resources necessary to critically evaluate financial assurance information provided in support of CZCPA permit applications. Options for addressing this issue are identified below.

Options: The RAC could address this issue by:

- *Option #1: 3rd Party Verification.* Integrating third party verification into the conversion permit application process;
- *Option #2: DNREC Hires Consulting Expert.* Charging applicants a reasonable processing fee to provide funding for DNREC's Coastal Zone Act program to hire financial assurance experts (on a consulting basis); or
- *Option #3: Leverage Delaware Expertise.* Leverage existing financial assurance expertise from other Delaware state programs with established financial assurance divisions.

Option #1: 3rd Party Verification

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • Minimizes burden on DNREC to corroborate key FA information submitted by the applicant. • Provides applicant flexibility to choose verification consultant/company, subject to DNREC approval. 	<ul style="list-style-type: none"> • Safeguards need to be put in place to ensure that the third party is "arm's length" from the applicant.

Option #2: DNREC Hires Consulting Expert

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> • DNREC's Coastal Zone Act program is able to directly interact with the FA expert to ask questions/explore potential concerns. • Cost of expert could be covered through a permit fee. 	<ul style="list-style-type: none"> • Increased administrative complexity to identify and contract with expert. • Depending on fee amount, fees may act as a deterrent to potential conversion permit applicants.

Option #3: Leverage Delaware Expertise.

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none">• Least costly option for the applicant.	<ul style="list-style-type: none">• Delaware employees with financial assurance expertise may not have availability to assist review of conversion permit applications. The Work Group believes DNREC would need to hire an employee with financial assurance expertise to implement this option.

Additional Information: If the RAC chooses to integrate third-party verification into the conversion permit regulatory process, potential requirements for establishing entities as viable third parties commonly include:

- Appropriate licensing, professional qualifications
- A contractor with no existing/other business relationship with the applicant
- Must be pre-approved by the regulator, or be part of a pre-established list of acceptable practitioners issued by the state