

US EPA ARCHIVE DOCUMENT

Session 9: Financial Assurance



Booz | Allen | Hamilton

Session 9 Agenda: Financial Assurance

- ▶ Why financial assurance is necessary
- ▶ Who is required to provide financial assurance
- ▶ Cost estimates - closure and post closure
- ▶ Updating cost estimates
- ▶ Cost estimating software
- ▶ Mechanisms
- ▶ Liability
- ▶ Corrective action



Why financial assurance is necessary

Financial assurance balances private benefits and public costs



RCRA §3004(a)(6)



Who is required to provide financial assurance

Who needs RCRA financial assurance?

- ▶ DOES apply to permitted and interim status facilities
- ▶ DOES NOT apply to facilities exempt from treatment, storage, and disposal facility (TSDF) standards
- ▶ DOES NOT apply to generators
- ▶ DOES NOT apply to state or federally owned and operated facilities



Closure cost estimate

All TSDFs must prepare a closure cost estimate

- ▶ Based on closure plan
- ▶ Estimates most expensive cost of final closure
- ▶ Must include a third-party estimate
- ▶ On-site waste disposal included only under certain conditions
- ▶ Cannot incorporate salvage values or assume zero costs



Closure cost estimate

Land disposal units must prepare a post-closure cost estimate

- ▶ Applicable ONLY to land disposal units or units closing with waste in place
- ▶ Cost estimate is based on post-closure plan
- ▶ Estimates the projected costs for the entire post-closure period
- ▶ Must include a third-party estimate



§264.144(a)



Updating cost estimates

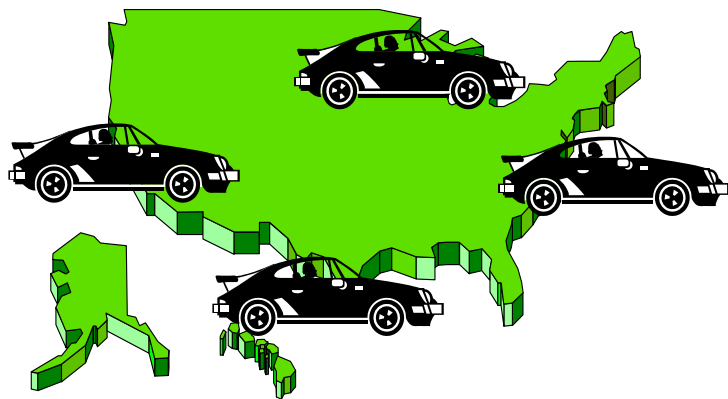
TSDFs must update cost estimates annually

- ▶ Why must TSDFs update closure and post-closure cost estimates?
 - Inflation
 - Facility expansion



Updating cost estimates

TSDFs may use gross national product (GNP) or gross domestic product (GDP) to derive the Implicit Price Deflator (IPD)



Gross Domestic Product



Gross National Product



Updating cost estimates

The IPD is used to update closure and post-closure cost estimates

$$\frac{\text{IPD Current Year}}{\text{IPD Previous Year}} = \text{inflation factor} \quad \text{or} \quad \frac{\text{NEW IPD}}{\text{OLD IPD}}$$

(inflation factor) x (old estimate) = new cost estimate



§264.142(b)



Updating cost estimates

Facilities must update cost estimates due to expansion or change



Original facility in 1995



Due to facility expansion in 2005, the new facility is larger, receives more waste, and will be more expensive to close

§264.142(c)



Cost estimating software

CostPro is a closure cost estimating software

- ▶ CostPro provides EPA and state RCRA permit writers with a method of evaluating cost estimates for closure and post-closure care of RCRA treatment, storage, and disposal units in a more efficient and consistent manner
- ▶ The estimates prepared by CostPro provide guidance to EPA in determining whether cost estimates prepared by owners and operators are complete and project accurate costs for closure and post-closure care



Cost estimating software

General procedure for evaluating cost estimates using CostPro

- ▶ Identify the closure activities to be conducted by the owner or operator as described in the closure plan
- ▶ Complete the worksheets provided by the software
 - Activity worksheets for specific units (e.g., tanks, containers)
 - Activity support worksheets for routine closure activities (e.g., sampling and analysis, treatment and disposal, and decontamination)



Cost estimating software

What is RACER™?

The RACER™ system is an automated, parametric cost estimating tool that provides estimates for all phases of remediation

Phases of Remediation	
Pre-Study	Remedial Action/Corrective Action
Studies	Operations and Maintenance
Remedial Design/Corrective Measures Design	Long Term Monitoring
Interim Action/Interim Measures	Site Closeout



Cost estimating software

What are the benefits of using RACER™?

- ▶ Consistent approach
- ▶ Accepted by regulatory and audit agencies
- ▶ Allows users to develop detailed estimates based on minimal site information
- ▶ Significant user base across federal government



Cost estimating software

What are the disadvantages of using CostPro?

- ▶ The worksheets do not include variables such as number of staff needed to collect samples
- ▶ CostPro takes longer to input the assumptions compared to RACER™
 - Is less robust when applied to complex scenarios
- ▶ CostPro is not auditable
 - RACER™ has gone through extensive validation and standardization
- ▶ CostPro has not been updated since the late 1990s



Mechanisms

TSDFs must use one of these six financial assurance mechanisms

- ▶ Trust Fund
- ▶ Surety Bond
- ▶ Letter of Credit
- ▶ Insurance
- ▶ Financial Test and Corporate Guarantee
- ▶ Combinations



§§264.143(a)-(f) and §§264.145(a)-(f)



Mechanisms - Trust Fund

TSDFs may satisfy financial assurance requirements by establishing a trust fund

- ▶ A trust fund allows an owner or operator to set aside money in increments according to a phase-in schedule (known as the pay-in period)
- ▶ At the end of the pay-in period, the facility will have:
 - Sufficient funds set aside to cover its financial assurance costs
 - Funds specifically earmarked for closure, post-closure care, and liability requirements

§264.143(a); §264.145(a); §264.151(a)



Mechanisms - Trust Fund

A trust fund allows TSDFs to set aside money for closure

- ▶ Annual payments during pay-in period
- ▶ Payment amount determined by using specific formula
- ▶ Amounts updated annually based on most current cost estimate
- ▶ After pay-in period, possible rebate or additional payment

§264.143(a); §264.145(a); §264.151(a)



TSDFs may satisfy financial assurance requirements by obtaining a surety bond

- ▶ A surety bond is a guarantee by a surety company that the owner's or operator's financial assurance obligations will be fulfilled
- ▶ If the owner or operator fails to pay or perform as specified in the bond, the surety company will become liable



Mechanisms - Surety Bonds

Surety bonds are guarantees by third parties to pay or perform closure

- ▶ Contract or agreement where a third party agrees to front money for, or perform closure/post-closure
- ▶ Owner and operator must repay the surety company
- ▶ Interim status facilities may not use performance surety bonds



§§264.143(b) & (c); §§264.145(b) & (c); §264.151(b)



Mechanisms - Letter of Credit

TSDFs may satisfy financial assurance requirements by obtaining a letter of credit

- ▶ A letter of credit is a guarantee by a financial institution that covers the owner's or operator's closure or post-closure care obligations
- ▶ The appropriate regulatory agency may draw on the letter of credit if the owner or operator fails to perform

§264.143(d); §264.145(d); §264.151(d)



A letter of credit is a commitment by a financial institution to cover closure costs

- ▶ Contract between the owner/operator, issuer (usually a bank), and EPA
- ▶ Must be irrevocable and issued for at least one year
- ▶ A company's credit history is taken into account by the issuing bank, as collateral may be required

Mechanisms - Insurance

TSDFs may satisfy financial assurance requirements by obtaining closure insurance

- ▶ Closure insurance guarantees that funds will be available for closure or post-closure care in the event that the owner or operator fails to perform
- ▶ Once closure or post-closure care begins, the insurer will be responsible for paying out funds, up to the face value of the policy, as directed by the appropriate agency



§264.143(e); §264.145(e); §264.151(e)



Mechanisms - Insurance

Insurance can be purchased to guarantee that funds will be available for closure

- ▶ Policy must be issued for face amount
- ▶ Policy must allow assignment to successor owner and operator
- ▶ Insurer may cancel, terminate, or decide not to renew the policy ONLY if the owner or operator fails to pay the premium

§264.143(e); §264.145(e); §264.151(e)



TSDFs may satisfy financial assurance requirements by passing a financial test

- ▶ An owner or operator with the financial assets to absorb the costs of closure, post-closure care, and liability obligations may comply with financial assurance requirements by using the financial test
- ▶ EPA's regulations outline the criteria that an owner or operator must meet to pass the financial test
 - Satisfy financial ratios or have acceptable bond rating
 - Have certain size relative to closure/post-closure responsibilities
 - Have significant assets in the United States

TSDFs may pass the financial test by obtaining a corporate guarantee

- ▶ An owner or operator may arrange a corporate guarantee to pass the financial test if the guarantor is either a:
 - Parent corporation
 - Sibling corporation
 - Firm with “substantial business relationship” with owner and operator
- ▶ The guarantor meets the financial test criteria on the owner’s or operator’s behalf
- ▶ The corporate guarantor is required to perform closure or post-closure care, or to establish a trust fund, if the owner or operator fails to perform



Mechanisms - Miscellaneous Provisions

Miscellaneous financial assurance provisions and allowances exist

- ▶ Mechanisms may be combined to cover costs - §264.143(g) & §264.145(g)
- ▶ One mechanism may be used for more than one facility - §264.143(h) & §264.145(h)
- ▶ Financial assurance is no longer required 60 days after closure or post-closure is certified - §264.143(i) & §264.145(i)
- ▶ State mechanisms allowed with EPA Regional Administrator approval - §264.149



Liability

TSDFs are required to maintain liability coverage until final closure



VS



§264.147



Liability

Sudden accidental occurrences are not continuous or repeated events

- ▶ Applies to all permitted and interim status TSDFs subject to financial assurance
- ▶ Facility must demonstrate:
 - \$1 million per occurrence
 - \$2 million annual aggregate



§264.147(a)



Liability

Non-sudden accidental occurrences are continuous events over time

- ▶ Applies to all permitted and interim status land treatment units, landfills, surface impoundments, and miscellaneous units (land disposal units)
- ▶ Facility must demonstrate:
 - \$3 million per occurrence
 - \$6 million annual aggregate



Liability

Sudden and non-sudden liability coverage may be combined

- ▶ When combining the two types of coverage, owners and operators must have at least:
 - \$4 million per occurrence; and
 - \$8 million annual aggregate



Corrective Action

Interim Guidance on Financial Responsibility for Facilities Subject to RCRA Corrective Action (2003)

- ▶ Addresses corrective action financial responsibility provisions at TSDFs that are permitted or subject to RCRA § 3008(h) orders
 - Timing and cost estimating
 - Financial assurance mechanisms
- ▶ Addresses responding to facilities that claim an inability to provide financial assurance for corrective action
 - Evaluating the financial health of such facilities
 - Environmental claims in bankruptcy filings

www.epa.gov/compliance/resources/policies/cleanup/rcra/interim-fin-assur-cor-act.pdf



Corrective Action

What Are the Mechanisms?

- ▶ Mechanisms
 - Trust fund
 - Surety bond
 - Letter of credit
 - Insurance
 - Corporate guarantee
 - Financial test (self-insurer)
 - State-specific mechanisms
 - Combinations of the above



Corrective Action

Fine-Tuning the Financial Assurance Requirements

► Suggestions

- Develop site- or facility-specific financial assurance requirements
- Permit or administrative order should include provisions to ensure adequacy of mechanism
- For orders, require regulator approval
- For orders, include penalties for not acquiring or maintaining financial assurance
- Request internal legal and financial analyst assistance prior to approval
- Monitor the mechanism's viability or success by requiring record keeping and submittal of reports to regulators



Corrective Action

Bankruptcy Filings

▶ Chapter 11

- Allows company to restructure its debts
- Does not solve financial problems
- Company can continue to operate
- Is not excused from compliance with environmental laws and regulations

▶ Chapter 7

- Allows company to liquidate if it is unable to solve financial problems
- Operations cease
- Chapter 7 trustee sells assets and distributes assets to creditors
- Trustee may abandon property
- Previously established financial assurance may be the only funding available for corrective action



Corrective Action

Office of Enforcement and Compliance Assurance (OECA) Initiatives

- ▶ Ensuring compliance with financial assurance requirements is a national priority in FY06-07
 - October 28, 2005 - Revised Model for RCRA § 7003 Administrative Orders on Consent contains language for cost estimates and financial assurance
 - February 8, 2006 - Model for RCRA § 3008(h) Administrative Orders on Consent contains language for cost estimates and assurances of financial responsibility
 - Provided guidance on cost estimating tools

<http://www.epa.gov/compliance/resources/policies/cleanup/index.html>



Summary of Key Points

- ▶ Financial assurance is required for closure, post-closure, and corrective action
- ▶ Amounts are based on cost estimates and must be updated annually to account for inflation
- ▶ Financial assurance is also required for liability (sudden and non-sudden)
- ▶ Facilities can choose between six basic financial assurance mechanisms

