

Financial Assurance Requirements for Solid Waste Management Facilities



EPA



Module 1

Overview of Financial Assurance Requirements



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Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Demonstrate a basic knowledge of the requirements for financial assurance for:
 - Municipal solid waste landfills (MSWLF)
 - Construction and demolition (C&D) debris disposal facilities
 - » Adjust cost estimates for inflation
 - » Identify the mechanisms that owners or operators can use to fulfill requirements for financial assurance

Overview of Financial Assurance Requirements

- ◆ Requirements for financial assurance help to ensure that funds are available to cover the costs of meeting environmental obligations should owners or operators be unable or unwilling to pay those costs
- ◆ Owners or operators are required to demonstrate financial assurance for:
 - » Closure and long-term care
 - » Corrective action for known releases (MSWLFs only)

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Overview of Financial Assurance Requirements Continued 1

- ◆ Owners or operators of MSWLFs and C&D debris disposal facilities must:
 - » Demonstrate financial assurance to obtain a construction permit
 - » Demonstrate and maintain financial assurance until they are released from that obligation by the Florida Department of Environmental Protection (DEP)
 - » Notify DEP if they enter bankruptcy

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Overview of Financial Assurance Requirements Continued 2

- ◆ To demonstrate financial assurance for closure and long-term care, owners or operators must:
 - » Estimate separately the costs of closure and long-term care
 - » Establish funds to cover those costs
 - » Report the information to DEP

continued...

Overview of Financial Assurance Requirements Continued 3

- ◆ To demonstrate financial assurance for corrective action, owners or operators of MSWLFs must:
 - » Estimate the cost of corrective action upon selection of a remedy
 - » Establish funds to cover those costs
 - » Report the information to DEP
- ◆ Financial assurance for corrective action must be in place no later than 120 days after the remedy has been selected

continued...

Overview of Financial Assurance Requirements

Continued 4

- ◆ Owners or operators of more than one solid waste management facility must provide financial assurance equal to the sum of the cost estimates for all their facilities
- ◆ MSWLFs and C&D debris disposal facilities owned by state or federal agencies are exempt from requirements for financial assurance

Overview of Requirements for Financial Assurance for MSWLFs

- ◆ MSWLFs owned by local governments and closed on or before October 1, 1988 are exempt from financial assurance requirements
- ◆ For new MSWLFs, financial assurance for closure and long-term care must be in place at least 60 days before the initial receipt of waste at the facility

Overview of Requirements for Financial Assurance for C&D Facilities

- ◆ Owners or operators of C&D debris disposal facilities operating under permits that were issued before May 1, 1992 were required to demonstrate to DEP proof of financial assurance by March 1, 1997
- ◆ Owners or operators of all other C&D debris disposal facilities were required to demonstrate to DEP proof of financial assurance by no later than April 1, 1998
- ◆ For new C&D debris disposal facilities, financial assurance for closure and long-term care must be in place before the initial receipt of waste at the facility

continued...

Purpose of Requirements for Closure and Long-Term Care

- ◆ Requirements for closure and long-term care are intended to help:
 - » Implement a managed, structured approach to the closing of solid waste management facilities and to provide long-term care for such facilities
 - » Minimize or eliminate long-term threats to human health and the environment posed by solid waste management facilities

Closure Requirements

- ◆ Owners or operators must plan for the abandonment of solid waste management operations before those operations are terminated
- ◆ Owners or operators must estimate the costs of closure and long-term care so that adequate funding to cover those costs can be set aside during the active lives of their units
- ◆ Owners or operators must develop and implement a closure plan that meets performance standards for closure

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Closure Requirements Continued 1

- ◆ The performance standards for closure are designed to:
 - » Minimize the need for further maintenance and controls
 - » Minimize or eliminate the release of pollutants to the environment
- ◆ Closure plans must be submitted to and reviewed and approved by DEP before an owner or operator can implement closure activities

continued...

Closure Requirements Continued 2

- ◆ At least 90 days before the date after which wastes no longer will be accepted, the owner or operator must submit to DEP an updated closure plan
- ◆ Owners or operators must have a professional engineer who is registered in Florida certify completion of all closure activities

Long-Term Care Requirements

◆ Owners or operators must:

- » Develop and implement a long-term care plan
- » Comply with requirements for long-term care (such as maintenance, monitoring, and reporting)
- » Have a professional engineer certify completion of all long-term care activities

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Long-Term Care Requirements Continued

- ◆ Owners or operators of MSWLFs must begin long-term care after completion of closure and continue such care for 30 years
- ◆ Owners or operators of C&D debris disposal facilities must begin long-term care after completion of closure and continue such care for 5 years

Purpose of Corrective Action

- ◆ Requirements for corrective action are intended to help:
 - » Assess, select, and implement corrective measures to remediate known releases of hazardous constituents to the environment
 - » Reduce or eliminate further releases of hazardous constituents to the environment
 - » Minimize or eliminate short- or long-term threats to human health and the environment posed by solid waste management facilities

Corrective Action Requirements

- ◆ Owners or operators of MSWLFs must sample and analyze groundwater as part of the corrective action program
- ◆ The program consists of detection, assessment, and corrective action
- ◆ The results of the statistical analyses of groundwater monitoring may trigger a requirement for corrective action

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Corrective Action Requirements Continued 1

- ◆ When corrective action is necessary, owners or operators of MSWLFs must:
 - » Characterize the nature and extent of the release
 - » Install additional monitoring wells as necessary
 - » Initiate an assessment of corrective measures

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Corrective Action Requirements Continued 2

- ◆ Using the results of the assessment of corrective measures, owners or operators of MSWLFs must select a remedy that:
 - » Protects human health and the environment
 - » Attains groundwater protection standards (GWPS)
 - » Controls the sources of releases of constituents to the environment to reduce or eliminate further releases

continued...

Corrective Action Requirements Continued 3

- ◆ Owners or operators of MSWLFs must prepare a report and notify DEP of the results of the assessment
- ◆ The owner or operator also must develop a schedule for initiating and completing remedial activities
- ◆ DEP may require the owner or operator to initiate source control or other measures to prevent further contamination of groundwater or to address existing contamination

Cost Estimates for Closure

- ◆ Owners or operators of MSWLFs and C&D debris disposal facilities must prepare cost estimates for closure that are based on:
 - » Use of a third party to perform closure activities
 - » Closure at the point during the active life of the facility at which the extent and manner of its operations would make closure most expensive
- ◆ Cost estimates for closure must be prepared for permitted portions of a landfill and for those portions for which a construction permit is sought

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Cost Estimates for Closure Continued 1

- ◆ Cost estimates for closure must be prepared by a professional engineer and must identify all sources of information used
- ◆ The owner or operator must increase the cost estimate if changes in the closure plan or operating conditions increase the maximum cost of closure

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Cost Estimates for Closure Continued 2

- ◆ Costs estimates for closure must include the costs of:
 - » Cover material
 - » Topsoil
 - » Seed
 - » Fertilizer
 - » Mulch
 - » Labor

Cost Estimates for Long-Term Care

- ◆ Owners or operators of MSWLFs and C&D debris disposal facilities must prepare separate estimates of the costs of long-term care that are based on:
 - » Use of a third party to perform long-term care activities
 - » Assumption of the point during the long-term care period at which activities would be the most expensive
- ◆ Cost estimates for long-term care must be prepared by a professional engineer and must identify all sources of information used

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Cost Estimates for Long-Term Care Continued 1

- ◆ Cost estimates for long-term care are calculated by multiplying the annual cost of long-term care by the number of years for which long-term care activities are required
- ◆ Cost estimates for long-term care must include the costs of:
 - » Care of the land surface
 - » Gas monitoring
 - » Pumping, transportation, monitoring, and treatment of leachate
 - » Monitoring, collection, and analysis of groundwater

Cost Estimates for Corrective Action

- ◆ Owners and operators must base cost estimates for corrective action on:
 - » Inclusion of the total cost of corrective action for the entire corrective action period
 - » Performance of all corrective action activities by a third party
- ◆ An owner or operator must increase the cost estimate for corrective action if changes in the corrective action plan or operating conditions increase the maximum estimated cost of corrective action

Adjustment of Cost Estimates for Inflation

◆ Owners or operators must:

- » Revise cost estimates for closure and long-term care for inflation and changes in the closure and long-term care plans annually during the active life of the facility
- » Revise cost estimates for long-term care for inflation and changes in the long-term care plan annually during the long-term care period
- » Revise the cost estimate for corrective action for inflation and changes annually until all corrective action activities have been completed

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Adjustment of Cost Estimates for Inflation Continued

- ◆ Owners or operators must adjust cost estimates for inflation within 60 days before the anniversary date of the establishment of the financial assurance mechanism
- ◆ Owners or operators that use the financial test or corporate guarantee must adjust cost estimates for inflation within 30 days after the close of that owner's or operator's fiscal year
- ◆ Owners or operators must keep copies of the adjusted cost estimates at the facility during the operating life of the facility

Annual Cost Adjustment Statement

- ◆ Owners or operators of MSWLFs and C&D debris disposal facilities must submit annually a cost adjustment statement that is certified by a professional engineer
- ◆ Cost estimates for closure, long-term care, and corrective action must be listed separately
- ◆ For owners or operators of MSWLFs that use an escrow agreement to demonstrate financial assurance, the statement must be submitted between July 1 and September 1 of each year

Derivation of the Inflation Factor

- ◆ How do I derive the most recent inflation factor?

$$1997 \text{ Deflator} / 1996 \text{ Deflator} = 1998 \text{ Factor}$$

- ◆ Divide the most recent annual implicit price deflator (1997) by the deflator for the previous year (1996)
- ◆ Multiply 1997 cost estimates by the resulting factor to adjust correctly for inflation in 1998

RCRA Inflation Factors, 1988 - 1998

Year of Old Cost Estimate	Times	Inflation Factor	Equals	Year of New Cost Estimate
1988	X	1.036	=	1989
1989	X	1.042	=	1990
1990	X	1.043	=	1991
1991	X	1.040	=	1992
1992	X	1.027	=	1993
1993	X	1.026	=	1994
1994	X	1.024	=	1995
1995	X	1.023	=	1996
1996	X	1.019	=	1997
1997	x	1.018	=	1998

Implicit Price Deflators for Gross National Product, 1985- 1998*

Year	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter	Annual
1985	77.67	78.29	78.80	79.49	78.57
1986	79.85	80.26	80.88	81.49	80.62
1987	82.12	82.71	83.36	84.12	83.09
1988	84.69	85.59	86.69	87.47	86.12
1989	88.48	89.42	90.16	90.91	89.75
1990	92.04	93.21	94.17	95.13	93.63
1991	96.29	97.01	97.71	98.32	97.33
1992	99.13	99.79	100.17	100.88	100.0
1993	101.84	102.34	102.83	103.50	102.63
1994	104.14	104.71	105.83	106.06	105.08
1995	106.73	107.22	107.72	108.26	107.49
1996	108.88	109.21	109.70	110.19	109.50
1997	110.95	111.37	111.70	112.03	111.52
1998	112.26	112.49	-	-	-

* United State Department of Commerce. Bureau of Economic Analysis, September 27, 1998

Source of the Implicit Price Deflator

- ◆ Implicit price deflator data can be obtained by contacting:

U.S. Department of Commerce
Bureau of Economic Analysis
Washington, D.C.
(202) 606-9732

- ◆ The data also may be obtained through the Internet at <http://www.bea.doc.gov>

Financial Assurance Mechanisms

- ◆ A variety of financial mechanisms are available to owners and operators to demonstrate financial assurance for closure and long-term care and corrective action, including:
 - » Trust fund
 - » Surety bond
 - » Letter of credit
 - » Insurance
 - » Financial test
 - » Corporate guarantee

- ◆ Owners and operators of MSWLFs also may use an escrow account to demonstrate financial assurance

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Financial Assurance Mechanisms Continued 1

- ◆ A single mechanism can be used to meet requirements for financial assurance for more than one unit
- ◆ A combination of several mechanisms may be used to meet requirements for financial assurance for one or more units
- ◆ Mechanisms that may be combined are:
 - » Trust fund
 - » Financial guarantee bond
 - » Letter of credit
 - » Insurance

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Financial Assurance Mechanisms Continued 2

- ◆ Trust funds, surety bonds, letters of credit, standby trust funds, certificates of insurance, financial tests, and corporate guarantees must be executed on the appropriate state-issued forms and submitted directly to DEP
- ◆ Documents that verify financial assurance by use of escrow accounts must be submitted directly to DEP

Release From Financial Assurance Requirements

- ◆ DEP may relieve owners or operators of responsibility for demonstrating financial assurance within 60 days after the receipt by DEP of certification that all closure and long-term care or corrective action activities have been completed
- ◆ DEP may extend those deadlines if it believes that the required activities have not been implemented properly

Summary of the Module

- ◆ Requirements for financial assurance help to ensure that funds are available to cover the costs of closure and long-term care and corrective action, should owners or operators be unable or unwilling to pay those costs
- ◆ Owners or operators of MSWLFs and C&D debris disposal facilities are required to demonstrate financial assurance for:
 - » Closure
 - » Long-term care
 - » Corrective action for known releases (MSWLFs only)

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Summary of the Module Continued

- ◆ Owners or operators may use any of several financial mechanisms to satisfy requirements for financial assurance
- ◆ Owners or operators must adjust cost estimates for closure and long-term care for inflation and changes in the closure and long-term care plans annually during the active life of the facility
- ◆ Owners or operators must adjust cost estimates for corrective action for inflation and changes annually until all corrective action activities have been completed

Module 2

Trust Funds



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Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Explain the structure and applications of and the regulatory requirements governing the trust fund mechanism
 - » Discuss the roles and responsibilities of the three parties involved in a trust fund agreement
 - » Generate trust fund payment schedules

Characteristics of the Trust Fund

- ◆ Trust funds are sums of money set aside to cover anticipated costs
- ◆ Interest is paid on assets held in trust
- ◆ Trust funds are overseen by a trustee (typically the trust department of a bank)
- ◆ Trust funds are established irrevocably; neither the trustee nor the owner or operator may cancel the trust fund without the written agreement of DEP

The Trust Fund, A Three-Party Agreement

- ◆ Grantor (owner or operator): Transfers assets periodically to a second party, called the "trustee"
- ◆ Trustee (financial entity): Holds such assets on behalf of a third party, called the "beneficiary"
- ◆ Beneficiary (DEP): Eventually may use the funds to pay for the costs of closure and long-term care or corrective action

Requirements of the Owner or Operator

◆ The owner or operator:

- » Must maintain the value of the trust fund at no less than the amount specified by the established minimum payment formula
- » Must update the cost estimates annually to account for inflation
- » Remains responsible at all times for all costs of closure and long-term care and corrective action, regardless of the amount currently held in trust

The Trustee

◆ The trustee:

- » May be a bank, savings and loan institution, or other qualified financial institution
- » Is empowered to invest assets held in the trust fund
- » Exacts a fee from the owner or operator for its services

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The Trustee Continued

◆ The trustee:

- » Must be an entity that has the authority to act as a trustee and whose operations are regulated and examined by a federal or state agency
- » Must submit annually to both the owner or operator and DEP a statement of the value of the assets held in trust

Basic Components of the Trust Fund

- ◆ The basic components of the trust fund are:
 - » Trust agreement
 - » Certification of acknowledgment
 - » Trust fund Schedule A
 - » Trust fund Schedule B
 - » Trust fund Exhibit A

Trust Agreement

- ◆ The trust agreement:
 - » Must be executed on DEP Form #62-701.900(5)(g)
 - » Must be accompanied by a formal certification of acknowledgment
- ◆ The owner or operator must submit to DEP a duplicate of the trust agreement with original signatures

Certification of Acknowledgment

- ◆ The certification of acknowledgment:
 - » Provides notarized verification that the trust fund has been established
 - » Must be submitted to DEP with the signed duplicate of the trust agreement

- ◆ An example of wording that might be used to execute the certification of acknowledgment is attached to DEP Form #62-701.900(5)(g)

Trust Fund Schedule A

- ◆ On Schedule A, the owner or operator must list for each facility:
 - » Name of the facility
 - » Address of the facility
 - » DEP groundwater monitoring system (GMS) identification number of the facility
 - » Current estimates of the costs of closure and long-term care or corrective action

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Trust Fund Schedule A Continued

◆ Trust fund Schedule A:

- » Must be submitted to DEP with the trust agreement
- » Must be updated within 60 days after any change in the cost estimates

Trust Fund Schedule B

◆ Trust fund Schedule B:

- » Specifies the amount of funds used initially to establish the trust fund
- » Must be submitted to DEP with the trust agreement
- » Need not be updated or resubmitted

Trust Fund Exhibit A

◆ Trust fund Exhibit A:

- » Provides a list of all persons authorized and designated by the owner or operator to give orders and instructions to and make requests of the trustee
- » Must be submitted to DEP with the trust agreement
- » Need not be updated or resubmitted, unless amended to modify the list

Trust Fund Payments for Closure and Long-Term Care

- ◆ The amounts of the payments into the trust fund depend on:
 - » The current value of the trust fund
 - » The total costs assured
 - » The period over which payments are to be made

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Trust Fund Payments for Closure and Long-Term Care Continued 1

- ◆ The owner or operator must make payments into the trust fund annually over the term of the initial permit or over the remaining operating life of the facility, whichever is shorter
- ◆ At the time of closure, the value of the trust fund must be equal to the current estimates of the total costs of closure and long-term care
- ◆ Because payments are made over time, the existence of a trust fund does not guarantee that the total amount of funds required to conduct closure and long-term care activities would be available should the facility close prematurely

Trust Fund Payment Schedule for Closure and Long-Term Care Continued 2

$$\text{Payment Value} = (\text{CE} - \text{CV}) / Y$$

- ◆ CE = Current cost estimates for closure and long-term care
- ◆ CV = Current value of the trust fund
- ◆ Y = Number of years remaining in the pay-in period

Sample Calculation of Trust Fund Payments

◆ Initial payment:

$$(CE - CV) / Y = (\$100,000 - \$0) / 5 = \$20,000$$

Assumptions:

- » The total amount of the current cost estimates is \$100,000
- » The trust fund is to be funded fully over a five-year period

continued...

Sample Calculation of Trust Fund Payments Continued

◆ Second-year payment:

$$(CE - CV) / Y = (\$101,800 - \$20,000) / 4 = \$20,450$$

Assumptions:

- » The original amount of the current cost estimates was \$100,000
- » The initial payment was \$20,000
- » The inflation factor for the second year is 1.018
- » The trust fund is to be funded fully over a four-year period

Sample Trust Fund Payment Schedule, 1993-1998

Year	[CE (\$) - CV(\$)] / Y	Mandatory payment (\$)	Total Value of Trust Fund (\$)	Inflation-Factor
1993	(\$100,00 - \$0) / 5	\$20,000	\$20,000	1.026
1994	(\$102,600 - \$20,000) / 4	\$20,650	\$40,650	1.024
1995	(\$105,062 - \$40,650) / 3	\$21,471	\$62,121	1.023
1996	(\$107,478 - \$62,121) / 2	\$22,679	\$84,800	1.019
1997	(\$109,520 - \$84,800) / 1	\$24,720	\$109,520	1.018
1998	(\$111,4910 - \$109-520)	\$1,971	\$111,491	(1999 factor not yet available)

Schedule, 1993 - Effects of Interest Earnings and Trustee's Fees and Taxes on Trust Fund Payment 1998

Year	With Interest, Fees & Taxes	[CE(\$)-CV(\$)]/Y	Mandatory Payments (\$)	Interest Earnings at 5% (\$)	Trustee's Fees & taxes	Total Value of Trust Fund (\$)	Inflation-Factor
1993	No	(\$100,000 - \$0)/5	\$20,000	-	-	\$2,000	1.026
1993	Yes	(\$100,000 - \$0)/5	\$20,000	\$1,000	(\$210)	\$2,790	1.026
1994	No	(\$102,600 - \$20,000)/4	\$20,650	-	-	\$40,650	1.024
1994	Yes	(\$102,600 - \$20,790)/4	\$20,453	\$2,062	(\$433)	\$42,872	1.024
1995	No	(\$105,062-\$40,650)/3	\$21,471	-	-	\$62,121	1.023
1995	Yes	(\$105,062 - \$42,872)/3	\$20,730	\$3,180	(\$668)	\$66,114	1.023
1996	No	(\$107,478 - \$62,121)/2	\$22,679	-	-	\$84,800	1.019
1996	Yes	(\$107,478 - \$66,114)/2	\$20,682	\$4,340	(\$911)	\$90,226	1.019
1997	No	(\$109,520 - \$84,800)/1	\$24,720	-	-	\$109,520	1.018
1997	Yes	(\$109,250 - \$90,226)/1	\$19,294	\$5,476	(\$1,150)	\$113,491	1.018
1998	No	(\$111,491 - \$109,520)	\$1,971	-	-	\$111,491	(1999 factor not yet available)
1998	Yes	(\$111,491 - \$113,846)	(\$2,355)	-	-	\$111,491	(1999 factor not yet available)
TOTAL	No	-	\$111,491	-	-	-	-
TOTAL	Yes	-	\$98,804	\$16,058	(\$3,372)	-	-

Payment Options

◆ Owner or operators can:

- » Make payments into the trust fund according to the established formula
- » Make payments into the trust fund at an accelerated rate (however, the owner or operator still may be required to make small annual payments into the trust)
- » Deposit the full amount of the estimated current value of the future costs of closure and long-term care when the fund is established

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Payment Options Continued

- ◆ The owner or operator must continue to update the trust fund annually to account for inflation over the entire operating life of the facility
- ◆ If the trust fund is established after another mechanism has been used, the first payment must be at least the amount that the fund would contain if the trust fund had been used from the beginning

Effects of Making Payments Into the Trust Fund at an Accelerated Rate, 1993 - 1998

Year`	[CE(\$)-CV(\$)]/Y	Mandatory Payments (\$)	Actual Payments (\$)	Interest Earnings at 5% (\$)	Trustee's Fees & taxes	Total Value of Trust Fund (\$)	Inflation-Factor
1993 minimum	(\$100,000 - \$0)/5	\$20,000	\$20,000	\$1,000	\$210	\$20,790	1.026
1993 Accelerated	(\$100,000 - \$0)/5	\$20,000	\$90,000	\$4,500	\$945	\$93,555	1.026
1994 minimum	(\$102,600 - \$20,790)/4	\$20,453	\$20,453	\$2,062	\$433	\$42,872	1.024
1994 Accelerated	(\$102,600 - \$93,555)/4	\$2,261	-	\$4,678	\$982	\$94,251	1.024
1995 minimum	(\$105,062 - \$42,872)/3	\$20,730	\$20,730	\$3,180	\$668	\$66,114	1.023
1995 Accelerated	(\$105,062 - \$97,521)/3	\$2,604	-	\$4,863	\$1,021	\$101,093	1.023
1996 minimum	(\$107,478 - \$66,114)/2	\$20,682	\$20,682	\$4,340	\$911	\$90,226	1.019
1996 Accelerated	(\$107,478 - \$101,093)/2	\$3,193	-	\$5,550	\$1,061	\$104,996	1.019
1997 minimum	(\$109,520 - \$90,226)/1	\$19,294	\$19,294	\$5,476	\$1,150	\$113,846	1.018
1997 Accelerated	(\$109,250 - \$104,996)/1	\$4,524	-	\$5,250	\$1,102	\$109,144	1.018
1998 minimum	(\$111,491 - \$113,846)	(\$2,355)	(\$2,355)	-	-	\$111,491	(1999 factor not yet available)
1998 Accelerated	(\$100,000 - \$109,144)	\$2,347	2,347	-	-	\$111,491	(1999 factor not yet available)

Trust Funds for Corrective Action

- ◆ To ensure that sufficient funds will be available to cover the costs of corrective action during the second half of the corrective action period, the mechanism allows the owner or operator to fund the trust gradually over the first half of the corrective action period
- ◆ The initial payment into the trust fund must be made no later than 120 days after the selection of the corrective action remedy
- ◆ At the end of the pay-in period, the balance of the trust fund must be sufficient to cover the costs of corrective action during the second half of the corrective action period

continued...

Trust Funds for Corrective Action Continued

- ◆ The owner or operator must continue to update the trust fund annually for inflation over the entire corrective action period
- ◆ The mechanism does not guarantee that the total amount necessary to cover the cost of corrective action would be available to DEP should the facility prematurely discontinue corrective action activities

Payment Schedule for Trust Funds For Corrective Action

$$\text{Payment Value} = (\text{RB} - \text{CV}) / Y$$

- ◆ RB = Current required trust fund balance (one half the current estimate of the cost of corrective action)
- ◆ CV = Current value of the trust fund
- ◆ Y = Number of years remaining in the pay-in period (one half the estimated duration of the corrective action period)

Sample Calculation of Trust Fund Payments

◆ Initial payment:

$$(RB - CV) / Y = (\$50,000 - \$0) / 4 = \$12,500$$

Assumptions:

- » The total current cost estimate for corrective action is \$100,000
- » The estimated duration of the corrective action period is eight years

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Sample Calculation of Trust Fund Payments Continued

◆ Second-year payment:

$$(RB - CV) / Y = (\$51,300 - \$12,500) / 3 = \$12,933$$

Assumptions:

- » The original corrective action cost estimate was \$100,000
- » The initial payment was \$12,500
- » The inflation factor for the second year is 1.026
- » The trust fund is to be funded fully over a four-year period

Sample Payment Schedule for a Trust Fund For Corrective Action, 1992 - 1996

Year	$[R(\$) - CV(\$)] / Y$	Mandatory Payments (\$)	Total value of trust Fund (\$)	Inflation-Factor
1992	$(\$50,000 - \$0) / 4$	\$12,500	\$12,500	1.028
1993	$(\$51,400 - \$12,500) / 3$	\$12,967	\$25,467	1.028
1994	$(\$52,736 - \$25,467) / 2$	\$13,635	\$39,102	1.022
1995	$(\$53,896 - \$39,102) / 1$	\$14,794	\$53,896	1.026
1996	$(\$55,297 - \$53,896)$	\$1,401	\$55,297	(1997 factor not yet available)

Cancellation of the Trust Fund

- ◆ The trustee may not cancel the trust fund
- ◆ The owner or operator may cancel the trust fund only when at least one of the following conditions has been met:
 - » Alternative financial assurance has been substituted
 - » The owner or operator no longer is required to demonstrate financial assurance

Requests for Reimbursement

- ◆ The owner or operator may request reimbursement from the trust fund to pay for the costs of closure and long-term care or corrective action
- ◆ Requests for reimbursement will be granted only if funds left in the trust are sufficient to cover the remaining estimated costs

Summary of the Module

- ◆ Trust funds are sums of money set aside to cover anticipated costs
- ◆ The owner or operator must make payments into the trust fund annually over the term of the initial permit or over the remaining operating life of the facility, whichever is shorter
- ◆ The value of the trust fund must be maintained at no less than the amount specified by the established minimum payment formulas
- ◆ The owner or operator may request reimbursement from the trust fund to pay for the costs of closure and long-term care or corrective action

Module 3

Surety Bonds



EPA



Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Explain the structure and application of and the regulatory requirements governing the surety bond mechanism
 - » Discuss the roles and responsibilities of the three parties involved in a surety bond contract
 - » Identify the financial guarantee bond and the performance bond mechanisms and distinguish between them
 - » Discuss the nature and purpose of the standby trust fund

continued...

Characteristics of the Surety Bond

- ◆ The bond is issued by a surety company for a premium paid by the owner or operator
- ◆ The surety's liability is limited to the penal sum of the bond
- ◆ The penal sum of the bond must equal the sum of the current cost estimates

continued...

Characteristics of the Surety Bond

- ◆ The owner or operator must establish a standby trust fund in conjunction with the surety bond
- ◆ The surety becomes liable under the bond obligation if the owner or operator fails to perform as guaranteed by the bond

The Surety Bond, A Three-Party Contract

- ◆ Principal (owner or operator): Purchases a surety bond by paying a premium to a second party, called the “surety”
- ◆ Surety (surety company): Guarantees payment or performance to a third party, called the “obligee”
- ◆ Obligee (DEP): Is assured that the obligations of the owner or operator to pay for the costs of closure and long-term care or corrective action will be fulfilled

Comparison With Insurance

- ◆ Surety bonds differ from traditional forms of insurance because:
 - » A surety bond is a three-party contract
 - » Sureties do not expect monetary losses; the surety will not issue a bond if it believes that losses might occur
 - » In the event of a loss, the surety retains full rights of recovery against the principal

Qualifications of Surety Companies

- ◆ A surety must be listed in the current U.S. Treasury Circular 570
- ◆ The circular is available:
 - » Through the Internet at
<http://www.fms.treas.gov/c570/index.html>
 - » From the U.S. Government Printing Office;
telephone (202) 512-1800

Use of Collateral

- ◆ Collateral is required for surety bonds for most environmental applications
- ◆ Sureties may request that as much as 100 percent of the penal sum of the bond be retained as collateral
- ◆ Because the surety retains potential liability for an indefinite period of time, collateralized funds may not be recoverable until the bonded obligation has been fulfilled

Two Types of Surety Bonds

- ◆ Financial guarantee bonds
- ◆ Performance bonds

Financial Guarantee Bonds

◆ Financial guarantee bonds:

- » Require the surety, in the event of default, to deposit into the standby trust fund an amount equal to the penal sum of the bond
- » Must be executed on DEP Form #62-701.900(5)(b)

Performance Bonds

◆ Performance bonds:

- » Require the surety either to perform closure and long-term care or corrective action activities or to deposit into the standby trust fund an amount equal to the penal sum of the bond
- » Must be executed on DEP Form #62-701.900(5)(c)
- » May not be used in combination with other financial assurance mechanisms

Standby Trust Fund

◆ Standby trust funds:

- » Are not financial assurance
- » Serve as a direct depository for funds collected from both financial guarantee and performance bonds
- » May be established with a nominal sum

continued...

Standby Trust Fund

- ◆ Standby trust funds:
 - » Must be fully funded before the beginning of final closure
 - » Must be executed on DEP Form #62-701.900(5)(h)
- ◆ Payments from the standby trust fund must be approved by DEP
- ◆ The trustee charges the owner or operator an annual fee for establishing and maintaining the standby trust fund

Comparison of Standby Trust Funds With Other Trust Funds

- ◆ For standby trust funds:
 - » Owners or operators are not required to make annual payments
 - » Owners or operators are not required to update Schedule A
 - » Trustees are not required to submit annual valuation statements
 - » Trustees are not required to submit notices of nonpayment

Documents Submitted to DEP

- ◆ The owner or operator must submit to DEP:
 - » A copy of the surety bond agreement, signed by both the surety and the owner or operator
 - » With the surety bond agreement, an originally signed duplicate of the standby trust agreement

Cancellation of the Surety Bond

- ◆ The surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to DEP 120 days in advance of cancellation
- ◆ If the surety serves notice of its intent to cancel the bond, the owner or operator must obtain alternative financial assurance within 90 days
- ◆ If the owner or operator fails to provide alternative financial assurance within 90 days, the surety must fund the standby trust

continued...

Cancellation of the Surety Bond

- ◆ The owner or operator may cancel the bond only when:
 - » Evidence of alternative financial assurance is submitted
 - » The owner or operator no longer is required to demonstrate financial assurance

Obligations of the Surety

- ◆ Sureties must fulfill obligations on a bond when:
 - » The owner or operator fails to fund the standby trust fund fully before final closure begins
 - » The owner or operator fails to perform closure or long-term care or corrective action activities
 - » DEP or a court has ordered that closure begin, and the owner or operator does not fund the standby trust fully within 15 days
 - » The surety has sent a notice of cancellation, and the owner or operator does not obtain alternative financial assurance within 90 days

Summary of the Module

- ◆ A surety bond is a three-party contract
- ◆ The surety becomes liable under the bond obligation if the owner or operator fails to perform as guaranteed by the bond
- ◆ Financial guarantee bonds require the surety, in the event of default, to deposit into the standby trust fund an amount equal to the penal sum of the bond

continued...

Summary of the Module

- ◆ Performance bonds require the surety, in the event of default, either to perform the required activities or to deposit into the standby trust fund an amount equal to the penal sum of the bond
- ◆ Sureties must be listed in the current U.S. Treasury Circular 570
- ◆ The owner or operator must establish a standby trust fund in conjunction with the surety bond

Module 4

Letters of Credit



EPA



Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Explain the structure and application of and the regulatory requirements governing the letter of credit mechanism
 - » Discuss the roles and responsibilities of the three parties involved in a letter of credit agreement

Characteristics of the Letter of Credit

- ◆ The letter of credit is issued by a bank or other qualified financial institution for a fee paid by the owner or operator
- ◆ The bank's fee and interest rate are negotiable and are based on a firm's creditworthiness and the face value of the letter of credit
- ◆ Collateral of as much as 100 percent of the face value of the letter of credit may be required

continued...

Characteristics of the Letter of Credit

- ◆ The bank's liability is limited to the face value of the letter of credit
- ◆ The face value of the letter of credit must equal the sum of the current cost estimates for closure and long-term care or corrective action
- ◆ The owner or operator must establish a standby trust fund in conjunction with the letter of credit

continued...

Characteristics of the Letter of Credit Continued 1

◆ The letter of credit must:

- » Be issued irrevocably for at least one year
- » Provide for automatic extensions of at least one year's duration

continued...

Characteristics of the Letter of Credit Continued

- ◆ Letters of credit that provide financial assurance for closure and long-term care must be effective before the initial receipt of waste by the facility
- ◆ Letters of credit that provide financial assurance for corrective action must be effective no later than 120 days after the selection of a corrective action remedy

The Letter of Credit, A Three-Party Agreement

- ◆ Issuer (bank or other qualified financial institution): Extends a line of credit on behalf of a second party, called the “account party”
- ◆ Account Party (owner or operator): Has an obligation to a third party, called the “beneficiary”
- ◆ Beneficiary (DEP): May draw funds in accordance with the terms of the letter of credit

Qualifications of Issuing Institutions

- ◆ Issuing institutions must:
 - » Have the authority to issue letters of credit
 - » Have letter of credit operations that are regulated and examined by a federal or state agency

Qualified Issuers

- ◆ All commercial banks
- ◆ Some mutual savings banks
- ◆ Some savings and loan institutions
- ◆ Some credit unions

Restrictions on the Owner or Operator

◆ The owner or operator:

- » Cannot draw upon the letter of credit to finance closure or long-term care or corrective action
- » Must repay, with interest, any funds drawn by DEP through the letter of credit

Submittals to DEP

- ◆ The owner or operator must submit to DEP:
 - » A signed copy of DEP Form #62-701.900(5)(a)
 - » A duplicate of the standby trust agreement (DEP Form #62-701.900(5)(h)) with original signatures
 - » A letter from the owner or operator as specified in 40 Code of Federal Regulations (CFR) 264.143(d)(4)

The Owner or Operator's Letter

- ◆ The letter from the owner or operator must:
 - » Specify the amount of funds assured by the letter of credit for each facility
 - » Refer to the letter of credit by number, issuing institution, and date
 - » Provide the name, address, and DEP GMS identification number of each facility covered under the letter of credit

Cancellation of the Letter of Credit

- ◆ The issuer may cancel the letter of credit by sending notice of cancellation by certified mail to both the owner or operator and DEP 120 days in advance of cancellation
- ◆ If the issuer serves notice of its intent to cancel the letter of credit, the owner or operator must obtain alternative financial assurance within 90 days
- ◆ If the owner or operator fails to provide alternative financial assurance within 90 days, DEP will draw on the letter of credit

Summary of the Module

- ◆ A letter of credit is a three-party agreement
- ◆ The face value of the letter of credit must equal the sum of the current estimates of the costs of closure and long-term care or corrective action
- ◆ The owner or operator must establish a standby trust fund in conjunction with the letter of credit
- ◆ The owner or operator must repay with interest any funds drawn by DEP through the letter of credit

Module 5

Insurance



EPA



Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Explain the applications of and the regulatory requirements governing the use of insurance to demonstrate financial assurance for closure and long-term care or corrective action
 - » Discuss the roles and responsibilities of the three parties involved in an insurance contract for closure and long-term care or corrective action

Characteristics of Insurance

- ◆ Insurance is a contractual arrangement under which the insurer agrees to compensate the policyholder for losses
- ◆ The purchase of insurance should transfer financial risk from the policyholder to the insurer
- ◆ The policy ensures payment of the costs of closure and long-term care or corrective action, regardless of whether the owner or operator is able to pay such costs

continued...

Characteristics of Insurance

- ◆ The insurer agrees to reimburse providers of closure and long-term care or corrective action
- ◆ The owner or operator pays premiums to the insurer
- ◆ The face value of the insurance policy must be equal to the sum of the current estimates of the total costs of closure and long-term care or corrective action
- ◆ The insurer's liability is limited to the face value of the policy

Insurance, a Three-Party Contract

- ◆ Insurer (insurance company): Promises payment of the costs of closure and long-term care or corrective action on behalf of a second party, called the "insured"
- ◆ Insured (owner or operator): Must fulfill its environmental obligations as directed by a third party, called the "beneficiary"
- ◆ Beneficiary (DEP): If the owner or operator fails to fulfill its environmental obligations as required, may request that payments under the insurance policy be made to specified parties to complete the necessary activities

Requirements of the Insurer

- ◆ The insurer must meet one of the two following requirements:
 - » Licensed to transact the business of insurance in one or more states
 - » Eligible to provide insurance as an excess or surplus lines insurer in one or more states

Insurance Policies

◆ Insurance policies must:

- » Ensure that funds will be made available to conduct activities necessary for closure and long-term care or corrective action when those funds are required
- » Ensure that the insurer will pay out funds, up to the face value of the policy, to the owner or operator or to other persons specified by DEP
- » Be issued with a face amount equal to the sum of the current estimates of the total costs of closure and long-term care or corrective action

continued...

Insurance Policies Continued

- ◆ Insurance policies must:
 - » Provide an option for automatic renewal at the face amount of the expiring policy
 - » Ensure that the insurer may not cancel the policy, except for failure to pay the premium
 - » Contain a provision that allows assignment of the policy to a successor owner or operator

Documents Submitted to DEP

- ◆ The owner or operator must submit to DEP:
 - » The certificate of insurance executed on DEP Form #62-701.900(5)(d)
 - » A duplicate of the insurance policy with original signatures, including all endorsements, when so requested by DEP

Reimbursement for Expenditures

- ◆ An owner or operator, or any other person authorized to conduct closure or long-term care or corrective action activities, may request reimbursement for costs incurred to conduct such activities
- ◆ Requests for reimbursement will be granted within 60 days after such requests are received by DEP provided that the remaining value of the policy is sufficient to cover the remaining estimated costs of closure and long-term care or corrective action
- ◆ Actual payments made by the insurer will not change the face amount of the policy, although the insurer's future liability will be decreased by the amount of the payments

continued...

Reimbursement for Expenditures

- ◆ As closure, long-term care, or corrective action activities are conducted, itemized bills are submitted to DEP with a request for reimbursement
- ◆ Within 60 days of receiving such bills, DEP will determine whether the expenditures are justified and instruct the insurer to reimburse the appropriate parties for costs incurred
- ◆ DEP may withhold authorization for some reimbursement payments if the total costs of the remaining activities are significantly higher than the remaining value of the policy

Maintenance of Coverage During Long-Term Care

- ◆ If insurance is used to demonstrate financial assurance for long-term care, the insurer must increase the face value of the policy annually during the long-term care period
- ◆ The annual increase must be equal to the face value of the policy, less any payments by the insurer for expenses for long-term care, multiplied by an amount equal to 85 percent of the most recent investment rate or the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities
- ◆ Reductions in the face value of the insurance policy during the long-term care period are not allowed, even if the face value exceeds the estimate of the cost of long-term care

The Investment Rate or Equivalent Coupon-Issue Yield

- ◆ The most recent investment rate for 26-week U.S. Treasury securities can be found in:
 - » The "Money and Investing" section of the *Wall Street Journal*
 - » The business sections of most major newspapers

Cancellation of Insurance Coverage

- ◆ If the premium is not paid, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner or operator and to DEP 120 days in advance of cancellation
- ◆ The policy may not be canceled when, on or before the date of expiration:
 - » DEP deems the facility abandoned
 - » DEP terminates or revokes the facility's permit
 - » DEP or the courts order closure

continued...

Cancellation of Insurance Coverage Continued

- ◆ The policy may not be canceled when, on or before the date of expiration:
 - » The owner or operator is named a debtor in a Title 11 bankruptcy proceeding
 - » The premium due is paid

Insurance for Corrective Action

- ◆ Insurance may be used to demonstrate financial assurance for corrective action
- ◆ Obtaining such insurance may be difficult, however, as financial assurance for corrective action is not required unless a release is detected and insurers generally do not issue policies to cover the cost of damages that already have occurred
- ◆ Such insurance coverage might be made available if the corrective action will take place over a number of years and the policy is written on a “finite risk” basis

Captive Insurance

- ◆ Captive insurance companies are wholly owned subsidiaries, formed exclusively to insure the exposures of their parent organizations
- ◆ Recently, owners and operators of MSWLFs in Florida have begun to submit certificates of insurance from captive insurance companies to fulfill requirements for providing financial assurance for closure and long-term care
- ◆ The use of captive insurance is not prohibited under the Florida solid waste management code

continued...

Captive Insurance Continued 1

- ◆ DEP believes that the use of captive insurance to demonstrate financial assurance may be inappropriate because:
 - » Captive insurance companies are held within the same corporate family as the owner or operator
 - » Captives may be undercapitalized or have insufficient reserves
 - » The financial soundness of a captive can be only as good as that of its parent corporation

continued...

Captive Insurance Continued 2

- ◆ By using captive insurance to fulfill requirements for financial assurance, owners and operators:
 - » Avoid the substantial costs of obtaining alternative third-party mechanisms
 - » Establish "self-assurance" without meeting the requirements of the financial test

Summary of the Module

- ◆ Insurance may be used to ensure payment of the costs of closure and long-term care or corrective action, regardless of whether the owner or operator is able to pay those costs
- ◆ The face value of the policy must be equal to the sum of the current estimates of the total costs of closure and long-term care or corrective action
- ◆ The policy must provide for automatic renewal at the face value of the expiring policy

continued...

Summary of the Module Continued

- ◆ The insurer may not cancel the policy, except for failure to pay the premium
- ◆ Recently, owners and operators of MSWLFs in Florida have begun to submit certificates of insurance from captive insurance companies to fulfill requirements for providing financial assurance for closure and long-term care

Module 6

Escrow Accounts



EPA



Objectives of the Module

◆ Upon the completion of this module, participants will be able to:

» Explain the structure and application of and the regulatory requirements governing the escrow account mechanism

» Generate an escrow account payment schedule

or

» Determine the minimum balance amount of the escrow account

Characteristics of the Escrow Account

- ◆ Owners and operators of MSWLFs may use an escrow account to demonstrate financial assurance
- ◆ Escrow accounts are sums of money set aside by the owner or operator to cover the anticipated costs of closure and long-term care or corrective action
- ◆ The escrow account is:
 - » Held and administered by the owner or operator
 - » Managed by an escrow agent that is acceptable to DEP

continued...

Characteristics of the Escrow Account

- ◆ Interest is paid on assets held in escrow
- ◆ The escrow account may be funded incrementally over the active life of the facility
- ◆ Owners or operators may establish fees, surcharges on existing fees, or other revenue-producing mechanisms to fund the escrow accounts

continued...

Characteristics of the Escrow Account Continued

- ◆ The mechanisms must generate revenues sufficient to meet the required account payment schedule or the new minimum balance formula
- ◆ For a new MSWLF, the initial payment into the escrow account must be made before the end of the first year after the initial receipt of solid waste at the facility, with a notice of such payment submitted to DEP
- ◆ Subsequent payments must be made into the escrow account at least annually, on the anniversary date of the first payment

Requirements of the Owner or Operator

- ◆ The owner or operator must:
 - » Maintain the value of the escrow account at no less than the amount specified by the established account payment schedule or the new minimum balance formula
 - » Update the escrow account annually to account for inflation
 - » Submit to DEP a signed duplicate of the escrow account agreement and an annual audit of the account

Escrow Account Agreement

- ◆ The escrow account agreement:
 - » Must contain wording similar to the sample language provided by DEP
 - » Must be accompanied by an audit of the account

Annual Audit of the Escrow Account

- ◆ The audit must:
 - » Be conducted by an independent certified public accountant (CPA)
 - » Be filed with DEP no later than December 31 of each year
 - » Report the year-end balance of the account and list the dates and amounts of all withdrawals and deposits
- ◆ Counties that use a single-audit accounting system must file the audit by March 31 of the following year

Escrow Account Payment Schedule for Closure and Long-Term Care

- ◆ The amounts of the payments into the escrow account depend on:
 - » The current value of the escrow account
 - » The total costs assured
 - » The period over which payments are to be made

Escrow Account Payment Schedule for Closure and Long-Term Care

$$\text{Payment Value} = (\text{CE} - \text{CV}) / Y$$

- ◆ CE = Current cost estimates for closure and long-term care
- ◆ CV = Current value of the escrow account
- ◆ Y = Number of years remaining in the pay-in period

Sample Calculation of Escrow Account Payments

◆ Initial payment:

$$(CE - CV) / Y = (\$100,000 - \$0) / 5 = \$20,000$$

Assumptions:

- » The total amount of the current cost estimates is \$100,000
- » The escrow account is to be funded fully over a five-year period

Escrow Account Minimum Balance Formula for Closure and Long-Term Care

$$\text{Minimum Account Balance} = [\text{CE} \times (\text{DE}/\text{DL}) - \text{E}]$$

- ◆ CE = Current cost estimates for closure and long-term care
- ◆ DE = Design life exhausted (the period of time between the date waste was first accepted at the unit and the account audit date)
- ◆ DL = Design life (the total anticipated operating life of the unit)
- ◆ E = Documented expenditures (current-year expenses for closure or long-term care that are identified in the closure plan and included in the year-end audit)

Sample Calculation of Escrow Account Minimum Balance

Minimum account balance:

$$[CE \times (DE/DL) - E] = [\$100,000 \times (1/5) - 0] = \$20,000$$

Assumptions:

- » The total amount of the current cost estimate is \$100,000
- » The facility will have been in operation for one year before the account audit date
- » The total anticipated operating life of the facility is five years
- » No expenses for closure or long-term care were documented for the current fiscal year

Government-Owned MSWLFs

- ◆ Owners or operators of government-owned MSWLFs:
 - » Need not calculate the costs of long-term care into the escrow account payment schedule or the minimum balance formula
 - » Must, at the time of closure and for each year thereafter, deposit funds sufficient to cover the costs of long-term care for the following year
 - » Must document in the closure plan how long-term care activities will be financed

Payment Options

◆ Owners or operators can:

- » Make payments into the escrow account using the established account payment schedule or the minimum balance formula
- » Make payments into the escrow account at an accelerated rate
- » Deposit the full amount of the estimated current value of the future costs of closure and long-term care when the account is established

continued...

Payment Options Continued

- ◆ The owner or operator must continue to update the escrow account annually to account for revisions in the cost estimates and inflation throughout the operating life of the facility
- ◆ If the escrow account is established after another mechanism has been used, the first payment must be at least the amount that the account would contain if the escrow account had been used from the beginning

Escrow Accounts for Corrective Action

- ◆ Escrow accounts may be used to demonstrate financial assurance for corrective action
- ◆ The owner or operator must deposit into the escrow account the full cost of corrective action within 120 days after a remedy has been selected
- ◆ If a local government can document specifically a non-general-revenue source of funds adequate to cover the total cost of corrective action, only that portion of the corrective action to be undertaken the following year need be funded

Uses of Funds Held in Escrow

- ◆ The owner or operator may use funds from the escrow account only to pay for:
 - » Closure and long-term care activities
 - » Corrective action activities
 - » Planning and construction of new resource recovery or landfill facilities, only if such payments do not deplete the fund to the extent that activities for closure and long-term care cannot be completed

continued...

Uses of Funds Held in Escrow Continued

- ◆ Revenues and accumulated interest may be used as payment or security for revenue bonds issued to comply with requirements for closure and long-term care or corrective action
- ◆ If the owner or operator does not operate another landfill, any funds that remain in the account after completion of closure and long-term care and corrective action shall be deposited into the general fund of the local government of jurisdiction

Summary of the Module

- ◆ Owners and operators of MSWLFs may use an escrow account to demonstrate financial assurance
- ◆ The escrow account is held and administered by the owner or operator
- ◆ Owners or operators may establish fees, surcharges on existing fees, or other revenue-producing mechanisms to fund the escrow accounts

Summary of the Module Continued

- ◆ Escrow accounts for closure and long-term care may be funded incrementally over the active life of the facility
- ◆ The value of the escrow account must be maintained at no less than the amount specified by the established account payment schedule or the minimum balance formula
- ◆ To demonstrate financial assurance for corrective action, the owner or operator must deposit into the escrow account the full cost of the corrective action within 120 days after a remedy has been selected

Module 7

Financial Test



EPA



Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Explain the structure and application of and the regulatory requirements governing the financial test
 - » Describe the financial criteria that owners and operators must meet to use the financial test
 - » Discuss the significance of reports from independent certified public accountants (CPA) related to the financial test

Characteristics of the Financial Test

- ◆ The financial test provides assurance that an owner or operator can cover the costs of closure and long-term care or corrective action without the use of a third-party mechanism
- ◆ Costs of closure and long-term care and corrective action are not covered automatically by a third party
- ◆ No funds are set aside in anticipation of the costs of closure and long-term care or corrective action
- ◆ The owner or operator pays no fees or premiums

continued...

Characteristics of the Financial Test

- ◆ The financial test may not be used in conjunction with other financial assurance mechanisms

- ◆ If the owner or operator no longer qualifies to use the financial test, the owner or operator must:
 - » Within 90 days after the close of the fiscal year, submit to DEP, by certified mail, a notice of intent to establish alternative financial assurance

 - » Within 120 days after the close of the fiscal year, establish such alternative financial assurance

continued...

Characteristics of the Financial Test Continued

- ◆ The financial test has two components:
 - » Financial component
 - » Recordkeeping and reporting component
- ◆ To pass the financial test, owners or operators annually must meet the requirements of each component

Financial Component

- ◆ To satisfy the financial component of the financial test, an owner or operator must:
 - » Meet one of two sets of financial criteria (alternatives 1 and 2)
 - » Meet requirements for tangible net worth
 - » Meet a requirement for domestic assets

Financial Component: Alternatives 1 and 2

◆ Alternative 1:

- » The owner or operator must meet two of three financial ratios
- » The owner or operator must have net working capital at least six times the sum of the current estimates of the total costs of closure and long-term care or corrective action

◆ Alternative 2:

- » The owner or operator must demonstrate financial soundness through investment-grade bond ratings

Financial Component: Alternative 1

- ◆ To pass alternative 1 of the financial test, the owner or operator must:
 - » Meet two of the following three ratios:
 - Total liabilities divided by net worth <2.0
 - Current assets divided by current liabilities >1.5
 - The sum of net income plus depreciation, depletion, and amortization divided by total liabilities >0.1
 - » Have net working capital at least six times the sum of the current estimates of the total costs of closure and long-term care and corrective action

continued...

Financial Component: Alternative 1 Continued 1

- ◆ The ratio of total liabilities to net worth:
 - » Measures the leverage position of an owner or operator
 - » Indicates the extent of debt present in an owner's or operator's capital structure
 - » Must be less than 2.0 to pass the test

continued...

Financial Component: Alternative 1 Continued 2

- ◆ The ratio of current assets to current liabilities:
 - » Measures the liquidity position of an owner or operator
 - » Evaluates the ability of an owner or operator to meet short-term expenses and other financial obligations, using such current assets as cash
 - » Must be greater than 1.5 to pass the test

continued...

Financial Component: Alternative 1 Continued 3

- ◆ The ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities:
 - » Measures the solvency position of an owner or operator
 - » Evaluates the ability of an owner or operator to cover its financing charges and debt exposure
 - » Must be greater than 0.1 to pass the test

continued...

Financial Component: Alternative 1

- ◆ The net working capital of the owner or operator must be at least six times the sum of the current total cost estimates for closure and long-term care and corrective action
- ◆ Net working capital is the difference between current assets and current liabilities
- ◆ The requirement is intended to ensure that the costs of closure and long-term care or corrective action will not force an owner or operator into bankruptcy

Financial Component: Alternative 2

- ◆ To pass Alternative 2 of the financial test, the owner or operator must have a current investment-grade bond rating of either:
 - » AAA, AA, A, or BBB, as issued by Standard and Poor's
 - » Aaa, Aa, A, or Baa, as issued by Moody's

Financial Component: Tangible Net Worth Requirements

- ◆ The tangible net worth of the owner or operator must be:
 - » At least \$10 million
 - » At least six times the sum of the current estimates of the total costs of closure and long-term care and corrective action
- ◆ Tangible net worth is the difference between total assets (minus all intangibles) and total liabilities

Financial Component: Domestic Assets Requirement

- ◆ The owner or operator must have assets located in the U.S. equal to either:
 - » 90 percent of total assets
 - » Six times the sum of the current estimates of the total costs of closure and long-term care and corrective action
- ◆ The requirement is intended to ensure that, in the event of bankruptcy, assets can be attached to pay for closure and long-term care or corrective action

Recordkeeping and Reporting Component

- ◆ Documents that the owner or operator must submit each year to DEP are:
 - » Chief financial officer's (CFO) letter
 - » A copy of the independent CPA's report on examination of the owner's or operator's financial statements for the latest completed fiscal year
 - » A special report from the owner's or operator's independent CPA

continued...

Recordkeeping and Reporting Component Continued

- ◆ Counties that use a single-audit accounting system must update the financial test documents submitted to DEP within 180 days after the close of each fiscal year
- ◆ All other owners or operators must update the financial test documents within 90 days after the close of each fiscal year

Recordkeeping and Reporting Component: CFO's Letter

◆ The CFO's letter must:

- » Be executed on DEP Form #62.701.900(5)(e)
- » Demonstrate that the owner or operator has complied fully with the financial component of the test
- » List cost estimates for all facilities covered by the financial test

Recordkeeping and Reporting Component: Report from Independent CPA

- ◆ The written opinion of an independent CPA ensures that the data in the financial statements correctly represent the financial condition of the owner or operator
- ◆ Generally, the CPA's opinion must be "unqualified" if the owner or operator is to pass the test
- ◆ DEP may choose to allow "qualified" opinions on a case-by-case basis

continued...

Recordkeeping and Reporting Component: Report from Independent CPA Continued 1

- ◆ Qualified opinions are reported:
 - » When the CPA believes the financial statements, except for certain qualifications, fairly represent financial condition
 - » When the CPA believes the financial statements present a fair representation of financial condition, subject to the outcome of certain unforeseeable events

Recordkeeping and Reporting Component: Special Report from Independent CPA Continued 2

- ◆ The special report from the independent CPA must:
 - » Confirm that the data in the CFO's letter are taken directly from or can be derived from the year-end financial statements of the owner or operator for the latest completed fiscal year
 - » State that no matters came to the attention of the accountant that caused the accountant to believe that the information contained in the CFO's letter should be adjusted

Proposed Revisions in the Financial Test

- ◆ On July 1, 1991, and again on October 12, 1994, EPA proposed to revise the criteria for the financial test
- ◆ EPA has elected to revise the financial test to make the test more readily available to certain large, financially strong firms
- ◆ DEP has not yet determined whether it will adopt EPA's proposed revisions for the financial test

continued...

Proposed Revisions in the Financial Test Continued 1

◆ To pass alternative 1 of the financial test, the owner or operator would be required to meet one of the following two ratios:

» Total liabilities divided by net worth < 1.5

or

» Cash flow (the sum of net income plus depreciation, depletion, and amortization) minus \$10 million, divided by total liabilities > 0.1

continued...

Proposed Revisions in the Financial Test Continued 2

- ◆ To pass alternative 2 of the financial test, the owner or operator would be required to demonstrate a current investment-grade bond rating of either:
 - » AAA, AA, A, or BBB, as issued by Standard and Poor'sor
 - » Aaa, Aa, A, or Baa, as issued by Moody's

continued...

Proposed Revisions in the Financial Test

Continued 3

- ◆ To pass either alternative of the financial test:
 - » The tangible net worth of the owner or operator must be greater than the sum of the current estimates of the costs of closure and long-term care or corrective action, plus any other obligations covered by a financial test, plus \$10 million
 - » The owner or operator must have assets located in the U.S. at least equal to the sum of the current estimates of the costs of closure and long-term care or corrective action, plus any other obligations covered by a financial test

continued...

Summary of the Module

- ◆ The financial test provides assurance that an owner or operator can cover the costs of closure and long-term care or corrective action without the use of a third-party mechanism
- ◆ To satisfy the criteria of the financial test, the owner or operator must demonstrate an investment-grade bond rating or meet two of three financial ratios
- ◆ The owner and operator also must meet criteria for tangible net worth, domestic assets, and, if necessary, net working capital

continued...

Summary of the Module Continued

- ◆ The financial test must be updated annually to determine the continued eligibility of the owner or operator
- ◆ The authenticity of the financial data reported in the owner's or operator's financial statements and in the CFO's letter must be verified by an independent CPA
- ◆ On July 1, 1991, and again on October 12, 1994, EPA proposed to revise the criteria for the financial test
- ◆ DEP has not yet determined whether it will adopt EPA's proposed revisions for the financial test

Module 8

Corporate Guarantee



EPA



Objectives of the Module

- ◆ Upon completion of this module, participants will be able to:
 - » Explain the structure and application of and the regulatory requirements governing the corporate guarantee
 - » Describe the criteria that guarantors must meet when using the corporate guarantee mechanism

Characteristics of the Corporate Guarantee

◆ The corporate guarantee:

- » May be used by a parent corporation to demonstrate financial assurance for a subsidiary company
- » Provides assurance that the guarantor can cover the costs of closure and long-term care or corrective action on behalf of the owner or operator
- » May not be used in combination with other financial assurance mechanisms

continued...

Characteristics of the Corporate Guarantee Continued

◆ The guarantor must:

- » Enter into a contract to fulfill the financial obligations of the owner or operator, if the owner or operator fails to do so
- » Be the parent corporation of the owner or operator
- » Annually meet all requirements of the financial test
- » Submit to DEP a corporate guarantee agreement executed on DEP Form #62-701.900(5)(f)

Documents Submitted to DEP

- ◆ Documents that must be submitted by the guarantor to DEP are:
 - » Corporate guarantee agreement
 - » CFO's letter
 - » Report from independent CPA
 - » Special report from independent CPA

The Corporate Guarantee Agreement

- ◆ The terms of the corporate guarantee agreement must specify that, if the owner or operator fails to fulfill its financial obligations, the guarantor will take one of two actions:
 - » Perform closure, long-term care, or corrective action activities itself
 - » Establish and fund a trust fund in the name of the owner or operator to pay for the necessary activities

Cancellation of the Corporate Guarantee

- ◆ The corporate guarantee:
 - » Remains in force until the guarantor sends a notice of cancellation to the owner or operator and to DEP
 - » May not be canceled until 120 days after the owner or operator and DEP have received the notice of cancellation
- ◆ If the owner or operator fails to provide alternative financial assurance within 90 days of receipt of the notices of cancellation, the guarantor must provide the alternative financial assurance in the name of the owner or operator

Summary of the Module

- ◆ The corporate guarantee:
 - » May be used by a parent corporation to demonstrate financial assurance for a subsidiary company
 - » Provides assurance that the guarantor can cover the costs of closure and long-term care and corrective action on behalf of the owner or operator

continued...

Summary of the Module Continued

◆ The guarantor must:

- » Enter into a contract to fulfill the financial obligations of the owner or operator if the owner or operator fails to do so
- » Annually meet all requirements of the financial test