



Overview of Financial Assurance for Solid Waste Program

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Training Objectives: What Makes an Effective Financial Assurance Program?

- Present overview of the Financial Assurance Office staff and duties at DEQ
- Discuss the three parts of an effective financial assurance program:
 1. Rules and Regulations
 2. Technology and Engineering
 3. Money
- Present FA cases at DEQ involving different FA mechanisms
- Answer questions

DEQ Financial Assurance Staff

Office Director:

- Brent Williams

Financial Responsibility Program Coordinators:

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- Suzanne Taylor

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DEQ Financial Assurance Programs

- Solid Waste Disposal, Transfer, and Treatment Facilities, [9VAC20-70](#)
- Hazardous Waste Treatment, Storage and Disposal Facilities, [9VAC20-60](#)
- Underground Petroleum Storage Tanks, [9VAC25-590](#)
- Aboveground Petroleum Storage Tanks and Pipelines, [9VAC25-640](#)
- Privately-owned Sewerage Systems, [9VAC25-650](#)
- Vessels Transporting Solid/Medical Waste - waters of VA, [9VAC20-170](#)
- Biosolids Program, [9VAC25-32](#)
- Mitigation [9VAC25-210](#) and Nutrient Banking, [9VAC25-900](#)
- Tidal Dredging, [9VAC25-770](#)

DEQ Cost Recovery and Ability to Pay Programs

- Cost Recovery of VEERF, VPSTF Funds and DEQ Fish Kill Investigation and Fish Replacement Costs (DWR)
- Ability to Pay analysis for enforcement cases in all media and Responsible Party's portion of petroleum clean ups

Why do we need financial assurance?

- Most facilities have a limited life expectancy.
- Federal government requires that owners and operators provide financial assurance for safe operation of their facilities.
- Assumption that a facility owner/operator is an active business that is able to set aside funds now to pay for possible environmental issues that may occur down the road.

From Industrial Economics, Inc. Financial Assurance Primer, 2017

What are the risks of not having financial assurance?

- The risk that an owner/operator will not be able to pay for adequate closure, post-closure care or corrective action costs at the facility when these activities are most needed, and
- The risk that these costs will be paid for by the public (yes, the taxpayers—you and me)

From Industrial Economics, Inc. Financial Assurance Primer, 2017

Part One of an Effective FA Program: Rules and Regulations

“The regulations for disposal facilities (landfills) will not become any less complicated or costly. Operating financial assurance, post-closure care funding, and long-term care are a significant part of the cost of doing business.”

- T-9.1, “Providing Financial Assurance for Municipal Solid Waste Management Facilities,” SWANA Technical Policy, 1990

Historical and Regulatory Context for FA in the U.S.

- Solid Waste Disposal Act, 1965
- EPA Performance Standards for FA, 1988
- Subpart G of RCRA Subtitle D, 1991
- RCRA Subtitle D, 40 CFR 258.74
(current)



Statutory Authority for FA in VA

- Financial Assurance Regulations for Solid Waste Disposal and Treatment Facilities, 9VAC20-70:
 - Covers closure, post-closure care and corrective action costs
 - Statutory authority: §§10.1-1402 and 10.1-1410 of the Code of Virginia



Common Strengths of FA Regulations in VA

- Requires owner/operator (o/o) to develop and submit a written cost estimate for approval by DEQ.
- Requires o/o to increase their FA mechanism if an approved cost estimate changes; also requires DEQ to approve a reduction in costs and/or release of funds in excess of the current cost estimate.
- Gives o/o a choice of allowable mechanisms for their FA demonstration; mechanisms may cover more than one permit.
- Requires the FA issuer to notify o/o and DEQ by certified mail of intent to cancel a mechanism.

Part Two of an Effective FA Program: Technology and Engineering

9VAC20-70-81. General purpose and scope *(of the SW FA reg)*.

“A. In order to assure that the costs associated with protecting the public health and safety from the consequences of an abandonment or a failure to properly execute closure, post-closure care or corrective action at a facility are to be recovered from the owner or operator, the owner or operator of such facility shall obtain one, or a combination of the financial responsibility mechanisms described in this part. Financial responsibility mechanisms shall be in the amount equal to the cost estimate approved by the department using the procedures set forth in Article 3 (9VAC20-70-111 et seq.) of this part.”

Outdated vs. Current Closure Cost Estimate

2002 SWMF cost estimate:

Closure =

1/2 design capacity x \$70/ton

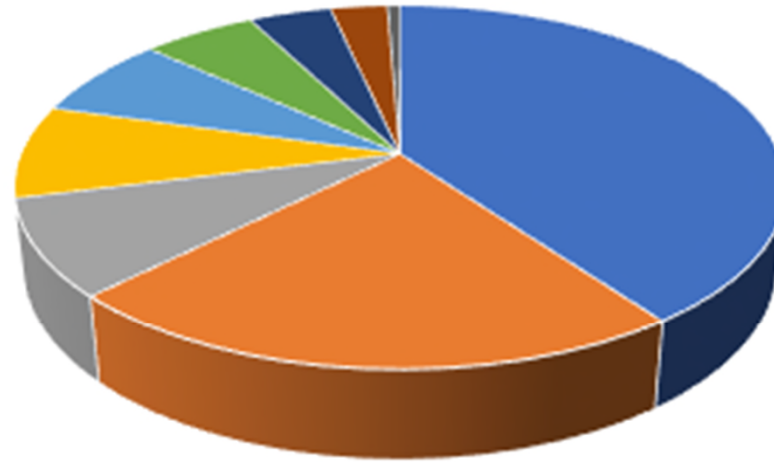
Current SWMF estimate:

- Waste removal cost
- Leachate/waste removal cost
- Decontamination cost
- Post-closure cost (if needed)
- P.E. Certification for closure
- Other cost: (if needed)

Cost Estimation Factors

- Accurate and current cost estimates are essential.
- Costs are site-specific and a function of facility design, operations and location.
- Cost estimates should be subject to periodic review, update and adjustment.
- Include an uncertainty (sensitivity) analysis to assess impact of changing one or more input values and “what if” scenarios.

Financial Mechanisms by Type



- Local Government Financial Test - 126
- Surety Bonds - 71
- Corporate Financial Test - 27
- Letter of Credit - 26
- Fully-Funded Trust - 23
- CD Assignments - 18
- Corporate Guarantee - 13
- Local Government Guarantee - 9
- Insurance (For MSE berms) - 2

What makes a good Financial Mechanism?

- The mechanism provides sufficient funds to perform the tasks required.
- The funds are either readily available or are easily accessed.
- The mechanism is in-line with the requirements of the regulation.



Financial Mechanisms

- **Self-Insurance Instruments:**

- Local Government or Corporate:
 - Financial Test
 - Guarantee

- **Third Party Instruments:**

- Trust Fund
- Letter of Credit
- Insurance
- Surety Bond (Financial Guarantee Bond or Performance Bond)
- Assignment of Certificate of Deposit

Financial Mechanisms

- **Self-Insurance Instruments:**
 - Local Government or Corporate:
 - Financial Test
 - Guarantee

Local Government Financial Test

- Letter from Chief Financial Officer
- Annual Comprehensive Financial Report (ACFR)
- Certificate of Funding
- Agreed upon procedures report

What if a local government or corporation fails a financial test?

Because...

The numbers don't add up (they cannot pass the financial ratio or bond rating test)

or

The annual audit contains a disclaimer of opinion (qualified opinion) from their auditor, or

or

There are incidences of malfeasance/wrongdoing/misconduct by a public or corporate official that impact the confidence of the annual financial reports.

Corporate Financial Test

- Standard and Poor's/Moody's (bond ratings)
- A ratio of less than 1.5 comparing total liabilities to net worth
- A ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus \$10 million, to total liabilities.

Guarantee

- Promise
- Guarantors provide a “Guarantee,” promising to conduct closure, post-closure, and/or corrective action if the owner/operator fails to do so.
- The guarantee is backed by a financial test, which is submitted annually.

Corporate Guarantee

- Used by a parent or affiliate
- Assures that the affiliate (parent) will cover any costs incurred by the subsidiary/affiliate (child)
- Backed by a financial test (submitted annually)
- Cannot be used in combination with other mechanisms

Financial Mechanisms

Self-insurance instruments:

- Local government or corporate:
 - Financial test
 - Guarantee

Third Party Instruments:

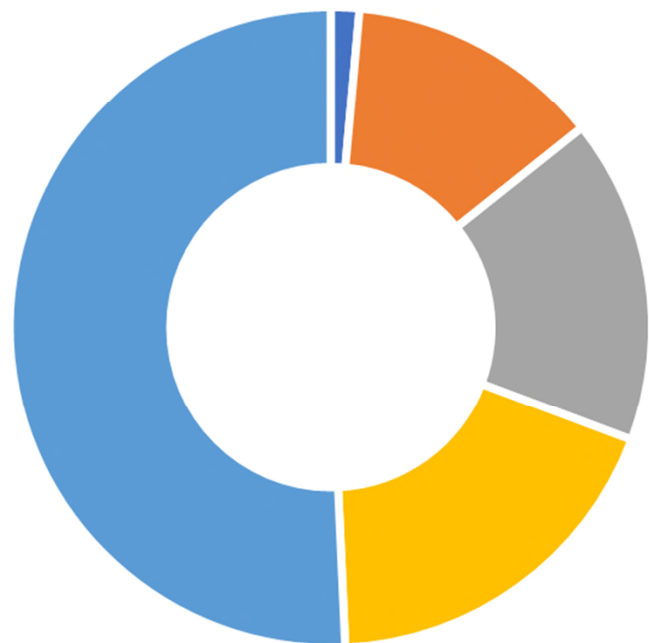
- Insurance
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Financial Mechanisms

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Third Party FA Instruments



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Insurance

The insurance policy must guarantee funds will be available to provide closure, post-closure care and corrective action

Assignment of Certificate of Deposit

A facility owner or operator (except for sanitary landfills) may assign a certificate of deposit to DEQ for the purpose of performing closure, post-closure care or corrective action at the site.

Trust Fund

Fully funded trust

- A trust containing all the closure, post-closure, and corrective action costs, with DEQ named as the beneficiary.

Pay in trust

- Payments are made into the trust by the owner/operator over the active or remaining life of the facility (whichever is shorter).

Standby trust

- Required for all third-party FA mechanisms, this is a trust with no funds in it, it is set up so there will be a place for the funds to be deposited if DEQ needs to cash a third-party mechanism to perform the closure, post-closure care or corrective action at the facility.

Letter of Credit

- This mechanism allows a banking institution, for an annual fee, to ensure that, at any time a stated amount of money is needed, it will be available for closure, post-closure care or corrective action costs of the facility.
- The amount of the letter of credit is equal to the current cost estimate (or may exceed it).
- The letter of credit must be issued for at least one year and it contains an evergreen clause that allows it to renew every year unless cancelled.
- The letter of credit may not be recalled or revoked.

Case Study – Letter of Credit

- For more information see:

Division of Land Protection and Revitalization Guidance Memo No. 04-2011 Financial Assurance for Stockpiles of Materials for Beneficial Use or Other Uses

Surety Bond

- **Payment Bond:** the bond company guarantees it will pay out the face value of the bond into the owner's standby trust fund
- **Performance Bond:** the bond company guarantees it will perform the required activities (closure, PCC) or pay out the penal sum of the bond. This type may not be combined with other FA mechanisms.

Case Study – Surety Bond



Any Questions?





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