

# LOCAL FINANCE BULLETIN

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## New Financial Assurance Regulations for Municipal Solid Waste Landfills

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In 1991 the Environmental Protection Agency (EPA) issued strict regulations concerning the design, location, operation, and closing of municipal solid waste landfills;<sup>1</sup> and requiring that landfill sites be monitored for thirty years after their closing. Because these new regulations dramatically increase the costs of landfill operation, closure, and post-closure care, the EPA required that both private and governmental operators of landfills covered by the regulations be able to demonstrate *financial assurance*: operators must set aside funds ahead of time to pay the costs of closure, post-closure care, and corrective action. This avoids a situation in which a landfill operator stops accepting waste but does not have funds to properly close the landfill and monitor it thereafter for contamination.

The financial assurance regulations apply to operators of municipal solid waste landfills that accepted waste on or after October 9, 1993 (extended to April 9, 1994, under certain conditions). The following are *not* covered by the financial assurance regulations:<sup>2</sup>

- Landfill operators that stopped accepting waste before October 9, 1993
- Landfill operators that sent resolutions to the Division of Solid Waste Management (the Division), in the North Carolina Department of Environment, Health, and Natural Resources, indicating that they would not accept waste on or after April 9, 1994, and whose proposed closings were approved by the Division

The EPA regulations specify six methods by which a local government may provide financial assurance. Though this bulletin reviews all of the methods, the reader should note that some of them, as discussed below under Evalua-

tion of Financial Assurance Mechanisms, are not currently available, and some of them are particularly costly.

This bulletin (1) briefly discusses estimating costs of closure and post-closure care, (2) analyzes the six mechanisms an operator may use to provide financial assurance for those costs, (3) analyzes the probable impact of the financial assurance regulations on North Carolina local government operators of municipal solid waste landfills, and (4) discusses the strengths and weaknesses of the various mechanisms.

### Annual Estimates of Closure, Post-Closure Care, and Corrective Action Costs

All sections of a landfill are never open at the same time; various sections are opened, used, and closed at different times. *Closure* refers to the closing of the largest area that will be open at any single time during the life of a landfill. *Post-closure care* refers both to the maintenance of a landfill and the monitoring tasks that an operator performs during the thirty-year period after a landfill stops accepting waste. *Corrective action* refers to remediation activities, such as treating ground water contamination, that may be necessary to correct problems with a landfill during its use or after its closure. Operators always will be responsible for financial assurance for closure and post-closure care activities for a landfill covered by the regulations, but will be responsible for financial assurance for corrective action only if there is a landfill problem that requires remediation. For closure and post-closure care, landfill operators are responsible for having detailed cost estimates prepared every year the landfill is in operation. Annual estimates of corrective action costs are also required if remediation has become necessary.

A detailed discussion of the preparation of these estimates is beyond the scope of this bulletin. In general, the estimates equal the current dollar costs of having a third-party perform the closure, post-closure care, and corrective action activities. The estimates in each of the three areas must be based on plans prepared for and retained by the landfill operator and filed with the Division and must be developed in accordance with the rules that have been adopted by the Health Services Commission (the North Carolina commission responsible for protecting public health). Guidelines for preparing these estimates may be obtained from the Division.

The estimates must be updated annually to take into account such factors as inflation, technological changes, changes in usable landfill area, and regulatory changes. [Note: Local government operators also will be required to prepare estimates of "closure and post-closure care costs" for their annual financial reports because of a new pronouncement from the Governmental Accounting Standards Board (GASB); however, the EPA and the GASB estimates are calculated differently and are therefore not necessarily the same amounts.] These EPA estimates will determine the amount of financial assurance that local government operators must provide; therefore, increased cost estimates will result in the need for increased financial assurance. Any reductions in the cost estimates resulting in a lower amount of financial assurance must first be approved by the Division. The amount of financial assurance determined by the annual estimates must be provided under one of the mechanisms (or a combination of them) discussed in the following section.

### Allowable Mechanisms

Local governments may demonstrate financial assurance for closure, post-closure care, and corrective action through any of several mechanisms. These may be used individually or in combination, except that performance surety bonds and insurance may not be combined with other methods. When the following discussion refers to documentation which must be placed in the local government's operating record, three copies of each such documentation must also be filed with the Division. Highlights of the allowable mechanisms are as follows.

#### Trust Fund

A government may establish a trust fund with a third-party trustee to hold moneys that will eventually be used to pay for closure, post-closure care, and corrective action costs. The trustee must have the necessary legal authority to be a trustee and must be regulated by a federal or state agency. Many units of government already have contracts with trust departments of financial institutions that serve as custodial agents for investment securities; it would be pos-

sible for a unit to use this custodial agent as the trustee for the moneys held for financial assurance. A sample trust agreement that must be used in establishing the trust fund is included in the regulations. A copy of the completed trust agreement must be retained in the local government's operating record. Some of the key provisions of the trust arrangement are as follows:

1. Only the unit of government and the trustee may have access to the trust fund, which is established for the benefit of the Division.
2. The trustee must invest the funds under the written direction of the local government. Investments are limited to the securities authorized under G.S. 159-30(c), except that a local government may not invest in its own securities and may use only insured demand or time deposits (these trust fund deposits, unlike other local government moneys, may not be invested in collateralized deposits).
3. Payments from the trust fund may be made with the approval of the Division for such items as reimbursements to the local government operator for closure, post-closure care, and corrective action expenditures; investment transaction costs; the costs of administering the trust; and the trustee's compensation. Documentation must be maintained for the expenditures.
4. A trustee may be changed; however, the prior trustee may not be released until the new trustee is in place.
5. If the local government does not make the required annual payment, the trustee must notify the Division of this fact.
6. The trust agreement may be amended or terminated only with the written consent of the local government, the Division, and the trustee.

With the trust fund, a government pays moneys periodically to the third-party trustee, based on a formula in the regulations. The time over which payments are made into the trust fund is known as the pay-in period, and the amount of the payment is based on the passage of time rather than landfill usage. Payments are equal to the current cost estimate for closure and post-closure care (less the amount that has already accumulated in the trust fund), divided by the number of years remaining in the pay-in period. Payments into the trust fund are made annually, with the first payment made before waste is received by the landfill or on April 9, 1994, whichever is later. Subsequent payments are made within thirty days after the annual anniversary of the first payment.

For a corrective action program, payments are completed by the halfway point of the estimated length of the

corrective action. The first payment must be equal to one-half of the current cost estimate of corrective action and must be made within 120 days after the corrective action remedy has been selected. (For example, assume that a corrective action remedy is selected on August 15, 1995, for remediation of a landfill problem. Corrective action is expected to take two years and cost \$500,000. An initial payment into the trust fund of \$250,000 would be necessary by December 13, 1995, with the balance being paid by August 15, 1996.)

If a local government operator changes to the use of a trust fund from one of the other allowable mechanisms for financial assurance, the initial payment into the fund must equal the amount that would be in the trust fund if it had been used since the landfill's coverage under the financial assurance regulations. If a landfill has been in existence for a significant length of time, this would be a substantial payment, making a switch to a trust fund difficult. For example, if a government switched from insurance to a trust fund after using insurance for ten years of a landfill's twenty-year life and the current cost estimate equaled \$10,000,000, the initial contribution would be \$5,000,000.

### **Surety Bond**

A second mechanism for demonstrating financial assurance is a financial guarantee bond or a performance surety bond, which in both cases must meet the requirements specified in the regulations. These two types of surety bonds function similarly, except that a financial guarantee bond guarantees that moneys will be available for closure and post-closure care, while a surety firm under a performance bond would either perform closure, post-closure care, or corrective action activities itself or provide adequate funds to ensure that the activities are performed. Under either bond, the local government makes annual premium payments to the surety firm. A surety company providing these types of bonds must be one of those firms listed in Circular 570 of the U.S. Treasury Department regulations. A copy of the surety bond must be retained in a local government's operating record.

With both types of surety bonds, a local government must have a standby trust similar to the trust arrangement discussed above, except that with a standby trust the local government is exempt from a strict schedule for contributions into the trust fund. In fact, a local government is subject to no payment schedule at all and has to ensure only that moneys are in the trust fund when needed to make payments for closure, post-closure care, and corrective action. Despite having some control over the timing of deposits into the standby trust fund, a local government still must ensure that moneys are available in the standby trust fund for future required payments for closure, post-closure care, and correc-

tive action. The terms of the surety arrangement simply guarantee that if the trust fund moneys are not adequate to make the payments, the surety firm makes the necessary payments directly into the standby trust. If the local government operator performs as required under the bond, the surety firm has no liability. The amount of the financial guarantee or performance surety bond must equal the current closure, post-closure care, or corrective action estimates unless a combination of financial assurance options is used. A local government utilizing this mechanism needs to have the surety bond in place before the initial acceptance of waste or by April 9, 1994, whichever is later, or no later than 120 days after a corrective action plan has been selected. The surety firm may cancel either type of bond with 120 days' notice; however, the local government operator may cancel the surety bond only if it has arranged for an alternative financial assurance mechanism.

### **Letter of Credit**

Another financial assurance option is a letter of credit issued by an authorized financial institution. The letter of credit must meet the following specifications: be issued for a period of at least one year, be irrevocable during this period, be in the format specified in the financial assurance regulations, be retained in the local government's operating record, and be issued in an amount at least equal to the current cost estimate for closure, post-closure care, or corrective action. (Thus the amount of the letter of credit must be increased if the cost estimates increase.) The letter of credit must be effective before the initial acceptance of waste or April 9, 1994, whichever is later, or no more than 120 days after a corrective action remedy has been selected.

As with a financial guarantee surety bond, a letter of credit is used to ensure that adequate moneys are available to pay for the costs of closure, post-closure care, and corrective action if the landfill operator does not provide sufficient funds to pay for these activities. Also as required by a surety bond, a local government must establish a trust fund in addition to arranging for a letter of credit. Even with the letter of credit, the local government still must ensure that moneys are in the trust fund for the required payments; however, it does not have to follow any set schedule for its contributions and consequently has some flexibility in funding the trust.

The terms of this mechanism guarantee that the financial institution providing the letter of credit would pay moneys directly into the standby trust if the trust fund balance is inadequate to make any required payments (meaning if the local government has not adequately funded the trust fund). If moneys in the trust fund are adequate, the financial institution has no liabilities under the letter of credit. The amount of the letter of credit is the current cost estimate of the closure, post-closure care, or corrective action amounts unless a com-

bination of financial assurance mechanisms is used. The financial institution (provider) may terminate the letter of credit with at least 120 days' notice. Without advance notice to the contrary from the provider, the letter of credit is automatically extended for another year. A local government operator may cancel the letter of credit only if alternative financial assurance is in place.

### Insurance

A fourth mechanism by which a local government may provide financial assurance is insurance provided by a firm licensed as an excess or surplus lines insurer in North Carolina. Insurance used for financial assurance must be in compliance with the requirements in the regulations and must be in place before the initial acceptance of waste or by April 9, 1994, whichever is later. The insurance policy, a copy of which must be retained in the local government's operating record, must be in the format specified in the regulations. Under this option, the face amount of the policy is at least equal to the current cost estimate of closure or post-closure care costs (EPA does not allow the use of insurance for corrective action).

There is no preset funding formula for the insurance; periodic premiums are assessed by the insurance carrier and paid by the local government. Unlike with the previously described options, a trust fund need not be maintained. The insurance policy guarantees that funds will be available for closure or post-closure care. Once closure or post-closure care begins, the insurer is responsible for disbursing funds to the local government to pay for the activities up to the face amount of the insurance policy. Payments by the insurer for closure or post-closure care will not change the face amount of the policy, but will reduce the insurer's liability for future payments. The insurer will reimburse the local government if the insurance policy has an unused balance, if the Division approves the reimbursement, and if appropriate documentation is retained in the local government's operating record. The insurance policy may not be canceled by the carrier unless the local government does not pay the premium and even in that event, only with 120 days' advance notice to the Division. As long as the premiums are paid, the policy is automatically renewed at least in its current amount. The local government operator may cancel the policy only if alternative financial assurance is obtained.

### Local Government Financial Test

Local governments may meet the financial assurance requirements through a local government financial test. This particular method allows a local government that meets certain standards to rely on its financial soundness to meet the financial assurance requirements. Although the test is based on EPA guidelines, it was specifically developed for North

Carolina local governments, primarily by the Division and the Local Government Commission staff. This test consists of a financial component, a public notice component, and a record-keeping component, each of which must be satisfied annually. The three components of the test are defined in the regulations.

#### *Financial Component*

Under the financial component of the local government financial test, a local government must meet three mandatory requirements and then qualify under one of two sets of criteria. The first mandatory requirement is that a local government have all its bond issues rated as investment grade, based on the ratings issued by Moody's, Standard & Poor's, Fitch's, or the North Carolina Municipal Council (at least Baa, BBB, BBB, or 75, respectively). A local government having one investment grade bond rating and one noninvestment grade bond rating does not qualify under this requirement. The other two mandatory requirements are that a local government must not be in default on outstanding general obligation bonds or any other long-term obligations and must not have had an operating deficit equal to 5 percent of its total annual revenue in either of the two prior fiscal years. In addition to the above mandatory requirements, a government must fulfill all of the criteria under either one of two options. The criteria under the first option are as follows:

1. The total of the current cost estimates of closure, post-closure care, corrective action, and any other environmental liabilities assured by a financial test<sup>3</sup> (i.e., hazardous waste, underground petroleum storage tanks, etc.) may not exceed 43 percent of a local government's total annual revenue.
2. Total cash and investments (excluding any unexpended proceeds from a local government's debt financings) must be greater than or equal to 5 percent of total operating expenditures (capital outlays are excluded, including a county's expenditures on school capital outlays).
3. Annual debt service expenditures must be less than or equal to 20 percent of total operating expenditures (same definition of *operating expenditures* as in number 2, above).

For the second option, the following criteria must be met:

1. A local government must have *at least one* investment grade bond rating from the above-listed rating agencies. (This differs from the previous mandatory requirement. A local government with *no* bond ratings would fulfill the mandatory requirement, but would not meet this criteria.)
2. The total of the current cost estimates of closure,

post-closure care, and corrective action, and any other environmental liabilities assured by a financial test<sup>4</sup> (i.e., hazardous waste, underground petroleum storage tanks, etc.) may not exceed 43 percent of a local government's total annual revenue.

The regulations cross-reference the terms *revenues*, *operating expenditures*, etc. to line numbers and sections in the Annual Financial Information Report (AFIR—Forms LGC 36 and LGC 37), submitted annually by cities and counties to the Local Government Commission.

#### *Public Notice Component*

Public notice is the second component of the local government financial test. It requires that the current cost estimates for closure, post-closure care, and corrective action and other relevant information be disclosed in a local government's annual financial report in accordance with generally accepted accounting principles. Since Governmental Accounting Standards Board Statement No. 18 already requires these disclosures, local governments will not have a problem fulfilling this requirement.

#### *Record-Keeping and Reporting Component*

The record-keeping and reporting component requires a local government to keep certain information in the operating record of the landfill and to update this information annually within 120 days of the end of each fiscal year. The primary document is a letter from the finance officer that is equivalent to the sample letter in the regulations. This letter should indicate the current cost estimates being covered by a financial test and demonstrate that the local government is fulfilling the provisions of the test. Much of this information can be compiled directly from the AFIR once that report is completed. This letter must be in the local government's operating record before the landfill begins accepting waste or by April 9, 1994, whichever is later, or within 120 days of the adoption of a corrective action plan. (Information from the 1992–93 fiscal year will be used in the first year's calculations.) If a governmental operator no longer meets the requirements of the local government financial test, it must notify the Division within 120 days and develop alternative arrangements to provide financial assurance.

#### **Capital Reserve Fund**

The final option that a local government may use to demonstrate financial assurance is the use of a capital reserve fund, an option designed specifically by the Division for North Carolina local governments. Capital reserve funds are commonly used by local governments to accumulate funds for future capital projects. A local government using this mechanism for landfills follows the requirements for

capital reserve funds in the regulations and G.S. 159-18 through -22 and generally accumulates funds for closure or post-closure care based on the passage of time as discussed earlier under Trust Fund. This type of capital reserve fund is modeled after the reserve fund used by counties to accumulate funds for revaluation purposes. Also, it is similar to the trust fund discussed above, with the exception that no third-party trustee is used since the local government is, in effect, serving as its own trustee. To use this method, a local government needs to establish a capital reserve fund through a formal, board-approved resolution that follows the format in the regulations. A copy of the capital reserve fund resolution, a certified copy of the minutes of the board meeting in which the resolution was approved, and documentation of deposits into and withdrawals from the capital reserve fund must be retained in the operating record.

Since the requirements for a capital reserve fund are similar to those of a trust fund, the following discussion highlights only the key distinctions between the two. The initial and annual contribution requirements for a capital reserve fund are similar to those of the funds discussed under Trust Fund, with contributions to the capital reserve funds being based on the passage of time rather than landfill usage. An exception to these contribution requirements exists for some older landfills that were not designed and constructed with a base liner system approved by the Division. For these landfills, all required contributions to the capital reserve funds must be made by December 31, 1997 (the date that landfills without a base liner system must be closed).

As with a trust fund, if a local government switches to the capital reserve fund from one of the other financial assurance options, the initial deposit into the fund must be equal to the amount that would be in the fund if it had been utilized since the landfill came under the financial assurance regulations. Even though there is no trustee, moneys may be withdrawn out of these funds *only* for the purposes for which the funds were established or for debt service payments for closure, post-closure care, or corrective action activities. (Note: G.S. 159-22 requires that moneys not be spent directly out of capital reserve funds, but first be transferred to another fund where they may be spent under a properly approved annual or project ordinance.) Capital reserve fund balances may not be spent for unauthorized purposes.

#### **Changing Methods of Providing Financial Assurance and Terminating Financial Assurance**

The use of a financial assurance mechanism may be terminated if a local government is no longer required to provide financial assurance. A local government operator may not change a method of providing financial assurance unless

another allowable method is in place. Local officials should be aware of the difficulty of changing financial assurance methods. For some of the options that have been discussed, such as surety performance bonds, changing to another mechanism might require that an operator establish a capital reserve fund or a trust fund and make an initial payment equivalent to the amount that would be in the fund if it had been used from the beginning of the time that financial assurance had been provided. If financial assurance had been provided for a number of years, this could be a significant payment. In most cases there is only a relatively short period of time to arrange for another method of financial assurance; therefore, a local government should make changes only after careful consideration.

### **Implications of Financial Assurance for North Carolina Local Governments**

Because of the tremendous cost increases for local government landfill operators caused by the new EPA regulations, officials with the Division in the summer of 1993 projected that the number of local government operators would decline. A decline has, in fact, occurred. By March 31, 1994, fifty-four local government landfills had either already stopped accepting waste or had filed resolutions with the Division indicating that they would not accept waste on or after April 9, 1994. Consequently, forty-two local governments (forty-one counties and one municipality) will no longer be local government landfill operators and therefore will not be subject to the new financial assurance requirements. This leaves only fifty-five local governments (forty-nine counties and six municipalities)<sup>5</sup> that will continue to accept waste on or after April 9, 1994. The other governments entered a variety of arrangements to handle solid waste, including contracting with private firms and building regional facilities.

The fifty-five local governments continuing to operate landfills will be subject to the new requirements and will need to select one or more methods from the available alternatives to provide financial assurance.

### **Evaluation of Financial Assurance Mechanisms**

The decision of which financial assurance mechanism to select may not, in fact, be very difficult because of a number of factors, such as the lack of availability and the cost of some methods. For example, surety bonds, insurance, and letters of credit are not available at the present time. If firms do begin to provide these products, they are likely to be expensive because of the potential liabilities to the firms offering them. Surety bonds and letters of credit will be even more expensive because governments will have to establish

standby trust funds as a backup mechanism. Governments using these options therefore have the expense of maintaining the trust funds in addition to the payments for the surety bonds and the letters of credit. Also, for North Carolina governments there are legal problems with letters of credit that make their use impractical.<sup>6</sup> Consequently none of these three methods is currently a viable alternative, leaving trust funds, capital reserve funds, and the local government financial test as the only realistic options.

Trust funds and capital reserve funds are very similar. The primary difference between the two is that a local government basically serves as its own trustee for a capital reserve fund, thus avoiding the expense of using a third-party trustee. The lower cost and widespread usage of capital reserve funds for various purposes make them preferable to trust funds.

The local government financial test also is a low-cost alternative and has the advantage that governments using it are exempt from a set contributions schedule. Of the six mechanisms by which a North Carolina local government<sup>7</sup> may provide financial assurance, it appears that the local government financial test and capital reserve funds are the most practical.

### **Potential Use of the Local Government Financial Test**

As discussed above, under the local government financial test a unit of government must meet several mandatory conditions: all bonds must have at least investment grade ratings; the government may not be in default on general obligation bonds or other long-term obligations; and the government may not have had an operating deficit of 5 percent or more as a percentage of total annual revenue in the last two fiscal years. The strong financial condition of North Carolina local governments allows them to take advantage of the local government financial test.

In late 1993 all fifty-five counties and municipalities had investment grade or higher bond ratings. (See table 1.) Thus they all meet the first mandatory requirement. (Fitch's was omitted from the analysis since that firm rates few, if any, local governments in North Carolina).

None of the fifty-five units, nor any other North Carolina local government for that matter, was currently in default on general obligation or other long-term obligations; therefore they all meet the second mandatory requirement.

A fund deficit, in accounting terms, exists when the liabilities of a fund exceed its assets. The terminology *total operating fund deficit*, as it is used in the regulations, would appear to be a situation in which liabilities exceed assets for the combined total of the operating funds (general, enterprise, most special revenue, etc.). A review of annual finan-

**Table 1**  
**The Local Government Financial Test: How Do N.C. Localities Fare?**

Unit of Government	Moody's Bond Rating	S & P Bond Rating	Municipal Council Rating	Total Revenues 1992-93	Financial Assurance Capacity
<i>Counties</i>					
Alamance	Aa	AA-	88	\$ 60,369,712	\$ 25,958,976
Alexander	A	A	79	12,763,245	5,483,895
Ashe	N/A	N/A	78	10,780,306	4,635,532
Brunswick	A1	A	79	57,767,846	24,835,874
Buncombe	Aa	AA-	83	128,215,399	55,132,622
Burke <sup>a</sup>	Aaa	AAA	81	45,531,924	19,578,727
Cabarrus	A1	A	87	60,540,813	26,032,550
Caldwell	A	A	80	36,842,982	15,842,482
Catawba	Aa	AA-	90	72,538,323	31,191,479
Cherokee	N/A	N/A	77	10,862,704	4,670,963
Cleveland	A1	A	82	49,971,778	21,487,865
Columbus	A	A	77	34,077,143	14,653,171
Cumberland	A1	A+	81	198,315,705	85,275,753
Davidson	Aa	AA-	88	69,796,116	30,012,330
Edgecombe	A	A	81	32,347,411	13,909,387
Gaston	A1	A+	87	98,796,966	42,482,695
Granville	A	A+	84	18,223,052	7,835,912
Greene	A	BBB+	75	8,498,431	3,654,325
Halifax	A	A-	83	36,634,270	15,752,736
Harnett <sup>b</sup>	N/A	N/A	81	36,293,868	15,606,363
Haywood	A	A-	79	36,791,655	15,820,412
Henderson	A1	A+	81	40,810,752	17,548,623
Iredell <sup>b</sup>	N/A	N/A	86	72,825,805	31,315,096
Jackson	Baa1	BBB+	77	20,876,764	8,977,009
Johnston	A	A	82	57,046,903	24,530,168
Lenoir	A1	A+	80	34,175,521	14,695,474
Lincoln	A	A	80	29,363,418	12,626,270
Macon	A	BBB+	79	18,007,956	7,743,421
Madison	Baa	N/A	75	9,903,246	4,258,396
Montgomery	A	A	79	13,573,019	5,836,398
Nash	A1	N/A	89	39,615,602	17,034,709
New Hanover	Aa	A+	87	112,318,799	48,297,084
Onslow	A1	A+	81	59,215,433	25,462,636
Orange	Aa1	AA	81	82,215,253	35,352,559
Pitt	Aa	AA-	86	73,777,493	31,724,322
Randolph	A1	A+	84	50,110,352	21,547,451
Robeson	A	A-	76	60,330,842	25,942,262
Rockingham	A1	A-	89	42,964,257	18,474,631
Rowan	A1	A+	89	63,927,558	27,488,850
Rutherford	A	A	78	32,300,442	13,889,190
Scotland	A	A	78	22,355,014	9,612,656
Surry	A1	A	81	33,974,823	14,609,174
Transylvania	A	A	77	19,613,005	8,433,592
Union	A1	A+	82	93,935,670	40,392,338
Vance	A	A	80	26,900,471	11,567,203
Wake	Aaa	AAA	92	335,462,293	144,248,786
Wayne	A	A+	83	47,433,894	20,396,574
Wilkes	A	A	81	32,617,366	14,025,467
Wilson	A1	A	86	40,394,759	17,369,748
<i>Cities</i>					
Albemarle	A	A	81	31,014,459	13,336,217
Durham	Aa1	AAA	85	200,058,355	86,025,093
Greensboro	Aa1	AAA	91	187,771,561	80,741,771
High Point	Aa	AA	86	143,616,377	61,755,042
Raleigh	Aaa	AAA	91	214,410,978	92,196,721
Winston-Salem	Aa1	AAA	89	191,314,885	82,265,401

The following units of government will no longer operate municipal solid waste landfills on or after April 9, 1994, and therefore are not subject to the financial assurance requirements: Alleghany, Anson, Avery, Beaufort, Bertie, Bladen, Carteret, Caswell, Chatham, Clay, Craven, Currituck, Dare, Davie, Duplin, Franklin, Graham, Hertford, Hoke, Jones, Lee, McDowell, Martin, Mecklenburg, Moore, Northampton, Pamlico, Pasquotank, Pender, Perquimans, Person, Polk, Richmond, Sampson, Stokes, Swain, Warren, Washington, Watauga, Yadkin, Yancey, and the town of Canton.

Bond ratings are current as of the following dates: Moody's, November 1993; Standard & Poor's, November 1993; North Carolina Municipal Council, December 31, 1993.

a. Triple-A bond ratings are due to third-party insurance on all of the unit of government's financings.

b. Although Harnett and Iredell counties have ratings on long-term obligations, they do not have ratings on general obligation debt from Moody's and S&P.

cial reports for the 1991–92 and 1992–93 fiscal years by the staff of the Local Government Commission indicated that this condition existed in none of the fifty-five local governments; therefore, all fifty-five counties and municipalities meet the three mandatory criteria of the local government financial test.

Even if the three requirements are fulfilled, a unit of government must still qualify under one of the two sets of criteria discussed under Local Government Financial Test, above. Since all fifty-five of the local governments have investment grade bond ratings, they all fulfill the first part of the second set of criteria; as discussed below, they also fulfill the second part of that set to an extent that would enable them to provide at least some amount of financial assurance under the local government financial test.

The question then becomes what amount of financial assurance could the fifty-five counties and municipalities provide under the local government financial test? In order to completely analyze this option, information is needed on the current cost estimates for closure, post-closure care, and corrective action and the amount of any other environmental liabilities that a local government is providing financial assurance for under a financial test (see note 3). Although some units of government already have this information, some do not; therefore a complete analysis is not possible. Another way to evaluate the impact of the local government financial test is to calculate the total amount of financial assurance (financial assurance capacity) that a local government could provide under the local government financial test for all environmental liabilities. As specified in the regulations, this is a simple calculation; the amount is equal to 43 percent of a government's total annual revenue (the second part of the second set of criteria). Based on information supplied by local governments on the Annual Financial Information Reports filed for the 1992–93 fiscal year, the authors have calculated the maximum amount of financial assurance or the financial assurance capacity that each of the fifty-five units of government could provide under the local government financial test. (See table 1 for the amounts as of June 30, 1993.) The actual capacities vary from \$3,654,325 for Greene County to \$144,248,786 for Wake County. Whether the capacity in each case is large enough to demonstrate financial assurance for the entire current cost estimate for closure, post-closure care, and corrective action is unknown; however each of the local governments does have the ability under the local government financial test to provide some, if not all, of the financial assurance needed. If a local government does not have the capacity to provide for the entire amount of financial assurance through the local government financial test, it will have to provide the remaining amounts of financial assurance through one or more of the other five options.

The local government financial test is useful as a means for providing financial assurance; however, in and of itself, it does not provide or accumulate any resources for paying for closure, post-closure care, and corrective action. Undue emphasis should not be placed on the bond ratings that are a component of the local government financial test since the ability to pay for these costs with debt financing is limited. Local governments will need to pay for the actual costs of closure, post-closure care, and possibly corrective action through another method. The best way to do this appears to be a capital reserve fund. This will allow a local government to accumulate over time the moneys needed for closure, post-closure care, and corrective action as landfill capacity is used. The advantage of using a capital reserve fund in combination with the local government financial test over providing financial assurance under the capital reserve fund option is that local governments would not be required to follow a strict annual contribution schedule and would, therefore, have some flexibility over when contributions were made to their capital reserve funds. In other words, contributions would have to be made, but not under the set schedule discussed above under Trust Fund and Capital Reserve Fund. Moneys could be placed in a capital reserve fund under a flexible schedule based on a local government's financial situation. Since most of the closure and post-closure care costs are not deemed to be capital expenditures, they would not qualify for debt financing. Therefore, these costs and corrective action costs will have to be financed by accumulating moneys, most probably in a capital reserve fund. If local officials provide financial assurance through the local government financial test, it is essential that they develop a long-term plan to accumulate resources to pay for the actual closure, post-closure care, and corrective action costs.

## Conclusion

The new EPA requirements for closure, post-closure care, and corrective action will lead to significantly higher costs for municipal solid waste landfill operations. For this reason, many local governments have already closed or made plans to close their landfills. Local government landfills that continue to accept waste will need to provide financial assurance for closure, post-closure care, and corrective action through one or a combination of different mechanisms. The method that appears to have the most benefit for North Carolina local governments is the local government financial test, which will most likely be used in conjunction with a capital reserve fund to accumulate moneys to pay for the future costs of closure, post-closure care, and corrective action. Local officials will have flexibility in making contributions to a capital reserve fund under this option; however, they must plan how they will accumulate moneys to pay the actual costs.



Anyone with questions about this subject should contact Susan Wright at the Division of Solid Waste Management (919-733-0692), Craig Barfield at the Department of State Treasurer (919-715-3733), or Lee Carter at the Institute of Government (919-966-4376).

## Notes

1. *Municipal* is the term used by EPA; however, the term includes solid waste landfills operated by both counties and municipalities.

2. Copies of a guidance document were distributed by the Division in January 1994. Local officials that do not have a copy of the regulations or the guidance document should contact Susan Wright at the Division, (919) 733-0692.

3. According to Susan Wright at the Division, most local governments provide financial assurance for no other environmental liabilities with a financial test. For those few governments that are using a financial test to provide financial assurance for other environmental liabilities, only small amounts are assured.

4. *See* note 3.

5. The Coastal Regional Solid Waste Management Authority began operations in the fall of 1993. Because a full year of operations has not been completed, audited financial information on this public authority's operations is not available. Consequently, this unit of government has not been included in this analysis.

6. A draw on a letter of credit would, in effect, be a borrowing, which is generally not authorized for local governments without voter approval. A government would need a budgeted appropriation to avoid drawing on the letter of credit and incurring a nonvoted debt. Since no draws could be made on the letter of credit, this would be an impractical option.

7. Private owners of municipal solid waste landfills may not use the local government financial test or capital reserve funds.

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