

# CREDIT TOPICS FOR MUNICIPAL SOLID WASTE FINANCING

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## **ABSTRACT**

As regulations for solid waste disposal become more restrictive financing requirements and needs will most likely increase. Standard & Poor's realizes this growing need and has developed a policy of disseminating information related to our criteria in this particular area. Just as the needs change, so do methods of financing, risks associated with operations, and our criteria as well. Similar to other situations, one solution does not fit all problems. What might be a desirable alternative for one community's situation could not be the best alternative for another community. Economic, social and political issues must be weighed for each situation. Once those priorities are established and the focus turns to financing the solution, Standard & Poor's believes decisions should be made with the most information available. To this point Standard & Poor's offers the invitation to call upon us early in the financing decision making process so that an understanding of our criteria can be utilized as the details of a financing develop. This will enhance decision making for that financing and also bring awareness to the possible implications on other aspects of the municipality's operations. Although the need for solid waste financing is not universal to the entire country, in some sections the need is quite serious and can have a tremendous impact on the economic vitality and financial

performance of a municipal entity. If the situation is left unattended, this could lead to negative implications for a city or county's rating.

## **INTRODUCTION**

Solid waste has presented a challenge for civilizations from the beginning of time. As we start a new decade, the challenge can arguably be said to be reaching a new peak. The heightened environmental awareness, coupled with the evolution of Federal and State Regulation as well as the dwindling number of landfills, have contributed to the complexity and cost of solid waste disposal. The goal of public officials in each community remains to find the most economic, environmentally sound, and politically acceptable solution for future solid waste disposal.

Increasingly, as costs and capital needs have risen, public entities have become more involved in financing the solutions. Methods of financing the solutions can take many shapes and forms. Generally, the choices for financing are either on a project or system basis and the security behind either of those methods are many and varied. But before we review S&P's criteria for such financing, a broader look at the implications of solid waste disposal for general municipal credits and economic development is needed.

With costs increasing and alternatives diminishing, a positive gloss on the implications on general obligation ratings is tough to contemplate. However, for those communities which have successfully faced and addressed these challenges, they are better positioned than their counterparts. If one views solid waste disposal as an infrastructure need with its cost rising, the financial and economic impacts are easy to imagine. In communities where future solutions have already been put into place and the cost of disposal has a more certain and controlled future, they will have a competitive advantage in business climate than communities which have not dealt with these needs. Such additional costs might tip a company's decision to locate or relocate to one community over another. For governmental units which provide for the cost of solid waste collection and disposal from the property tax base in their general fund, the future could pose additional financial strain to their operations. The rising costs combined with a limited revenue raising capability can provide for a challenge in financial management. All of these concerns are influenced by geographic location, and whereas alternatives for some parts of the country are very manageable, another region could be faced with far less attractive choices.

Geographic location also can have an impact on financing solid waste disposal solutions. States can differ with respect to environmental laws, waste flow control, power to franchise haulers and the governmental level responsible for solid waste disposal. One example is New Jersey's regulation of solid waste rates. Such unique features applicable to credit quality will be reviewed by S&P on a case-by-case basis.

S&P's criteria for solid waste financing can be divided into four interrelated aspects; legal provisions, service area economy, operations and finances which includes cost. These same factors are reviewed whether the financing takes the form of a system or project. But before I cover the criteria, a discussion of system versus project financing would be worthwhile.

A system financing could be defined as having more than one facility from which to provide a service. This can be a combination of disposal sites such as a waste-to-energy facility and a landfill or transfer station with several disposal site options. The key to a system is its ability to carry out a service; in this case solid waste disposal through varied options. This operating flexibility is in contrast to a project which relies on one option to carry out the service. S&P has rated both system and project financing for solid waste facilities. Obviously the inherent flexibility of a system can offer greater credit strength; however, a project financing can be made to be strong through emphasis on the

legal structure. For communities which want to address and control their solid waste disposal future, a system which can efficiently utilize different assets to solve a solid waste disposal problem seems the most logical. Although such a system might pose a risk due to ownership, the risk faced might be less than that of those communities which react slowly to the situation and don't have any control over future disposal costs.

## LEGAL PROVISIONS

Legal provisions are defined in the bond indenture and other financing documents. For both system and project financing, the analysis identifies the security for the bonds and the revenue stream. S&P reviews all necessary contracts for service, operation, construction, and energy sales.

The rating criteria for solid waste financing require that pre-operational and technological risks be addressed in the financing structure. To the extent those risks are left to bondholders, they will be part of the overall credit analysis of the financing. S&P does not assign provisional ratings in this area. Where the legal structures for a financing include a conditional service contract requiring payments to bondholders only if service is provided, the analysis of such risks focuses on the chances that an event resulting in nonpayment will occur. Because a conditional contract includes those risks, ratings on such issues are likely to be lower than the participant's general creditworthiness. A legal structure that results in a very remote risk of nonpayment due to no service being provided to bondholders will lead to a rating that more closely matches participant's creditworthiness.

Identifying the revenue stream begins with the source of money for debt service payments. The revenue stream can vary considerably among municipalities: A mixture of special taxes, disposal fees, and a municipal entity's credit can be pledged. By-product revenues also may be pledged, but they are considered a secondary revenue stream. Ultimate credit strength will be provided from the primary stream. A municipality might pledge to make payments through a service agreement, appropriations from its general fund, or its full faith and credit. In all of those circumstances, S&P will assess the general obligation rating, which will be critical to the rating determination. Where a full faith and credit is offered in addition to a revenue or user fee pledge, self support is examined to determine the debt level, if any, that should be folded into the municipality's debt ratios. A general fund pledge can be assessed as being equal to or generally not as

strong as a full faith and credit pledge. Any appropriations risk will be considered in determining a general fund's relative strength. With other municipal revenue pledges, such as a special tax or user fee, analysis focuses on the method of payment, and the ability to raise fees, and the method of collection. These pledges could be assessed as stronger, weaker, or equivalent in quality to an entity's general fund pledge.

A back-up user fee, such as a tip fee, can be pledged behind the primary revenues to add strength. If the back-up fee is formulated but not yet implemented, credit support will generally be weaker. If a method of billing and collections exists and just a levying of the fee is needed, S&P will generally consider the credit to be stronger. S&P also has assessed bonds secured by service agreements. When the payment for the agreement is based on the receipt of service, S&P assesses nonpayment risk. If the definition of service is broad and not specific to the plant, the payee's credit strength will more likely be reflected in the rating.

A key consideration in evaluating any revenue stream is its flexibility to withstand fluctuations in the secondary stream. S&P's view is that in different operating scenarios, the legal structure must provide a sufficient revenue stream to cover both operating costs and debt service payments. The legal structure should provide a revenue stream that can be maintained despite additional maintenance costs, lower throughput, energy output, or price, and outages caused by either system failure or environmental requirements.

Energy revenues, which are by-products of a resource recovery plant, may fluctuate because of changes in price and output. The primary revenue stream must be able to offset any declines in revenue flow from the secondary stream. Reserve funds may be required as a bridge from one budget year to the next, depending on the flexibility of the primary stream.

In some project financing, the primary stream can be divided into municipal and corporate components, with the latter in the form of a corporate guarantee. If the security is bifurcated, the credit quality of the corporate guarantor can have a direct impact on the project's credit rating. In those cases, S&P's corporate rating group will evaluate and rate the guarantee. S&P will also evaluate the municipal security, and the project will receive the lower of the two ratings. However, if the municipal security takes the corporate guarantor's credit risk, the guarantor's direct impact on the project's rating may be mitigated. In those cases, the municipal security's rating will be assigned, and exposure to project and vendor risk will be evaluated in the analysis of the municipal security.

The indenture should also outline common legal provisions such as a rate covenant, debt service reserve fund requirements, and additional bonds test. These provisions are reviewed together with the whole financing structure. In general, a rate covenant should require sufficient revenues to cover operating expenses and debt obligations. A fully funded debt service reserve in addition to working capital and replacement and renewal funds are essential credit elements. A timely replenishment of a debt service reserve fund in the event of a draw down is important. Additional bonds should be allowed for if certain requirements are met. The flexibility of issuing additional bonds must be balanced against protection for holders of outstanding bonds.

## **SERVICE AREA ECONOMY**

S&P reviews employment, population trends, and wealth and income indices to judge the underlying economic strength of the service area and its ability to pay for the financing. Service demand, or garbage flow, increases as an area's economy improves. The legal provisions should define and protect the service area and should be designed to capture its economic strength. Protection of service area can be accomplished in a number of ways, including waste flow control ordinances, franchises and contracts. Such methods will be reviewed for their legality and enforceability. If protection is not provided, S&P will analyze the resulting market risk.

To assess service demand, S&P first reviews historical garbage disposal alternatives, tonnage, and costs. Then S&P reviews the area's future disposal alternatives and determine how current facilities fit that outlook. To determine tonnage projections, S&P assesses other disposal alternatives, such as recycling, that may cause loss of the waste stream. S&P then compares the annual and lifetime capacity of the facilities to service area demand. If surplus capacity exists, S&P analyzes the additional cost and exposure of carrying that cost. If the facilities are inadequate to handle demand, the analysis will include the cost of additional facilities.

## **OPERATIONS**

S&P's focus in evaluating the operations of a solid waste system or project financing is its ability to handle regulatory requirements without disrupting service or

increasing costs. Waste disposal involves a number of environmental issues. A key consideration in the analysis is bond amortization. An example is a landfill's useful life should match the term of debt associated with it, and the legal structure must assure the ability to pay for the debt. By its nature, a system has an advantage over project financing in handling these risks, but a project can be structured to handle them effectively as well.

S&P reviews an independent consulting engineer's report, a historical operating record, and a meeting with management to evaluate management's ability to construct and operate the facilities. If a private operator contracts to run the system or facility, S&P will focus on the incentives for efficient operation. In all cases, an equitable agreement for both parties and termination clauses for nonperformance are necessary.

The operations of a system or a project are evaluated against the requirements of demand for disposal over the term of the bonds. If components of a system or a facility are temporarily out of service or permanently shut down, the system or project's ability to dispose of waste is reviewed. If the situation can be handled with a minimum of disruption in operations or cost increases, S&P will view that as a strength. The longer redundant facilities enable disposal activities to continue, the greater the credit strength. That time could be used to develop alternatives that might protect against a sudden price increase or avoid the need for reliance on an outside disposal source, which would subject operations to the whims of another entity for continuance and cost. S&P would view the resulting lack of control as a weakness.

S&P reviews the whole waste stream and disposal process to evaluate whether changes, such as growth of the service area, are adequately anticipated. S&P would try to determine whether the facilities are properly sized, if there are expansion plans, or if recycling has been accounted for in the projections of the waste stream.

Another potential cause for concern in analyzing waste-to-energy facilities is waste quality, which would be affected by economic activity. Quality is measured in terms of energy value, which can differ with recycling, commercial and industrial activity, and seasonal influences. Heating values generally rise with increases in paper and plastic, and any deviation from the expected Btu rate will have a direct result on revenue supplied by energy sales and throughput capacity of the plant. The deviations also could limit a resource recovery plant's ability to process its expected capacity. S&P would analyze the impact of that scenario on the operations of the system or project.

## FINANCES AND COSTS

In evaluating finances, S&P analysis focuses on the quality of debt service coverage. As with our focus on the legal structure, finances should provide sufficient coverage under all operating and nonoperating scenarios. Costs are viewed in their relationship to capacity to pay. Because the cost of disposal is generally rising, the comparison of future costs to historical costs is becoming less meaningful, but control and management of those costs are weighed against the risks. The effectiveness of the chosen alternative should be measured against the cost of future alternatives. By operating a solid waste system, a community generally has more control over future costs for planning purposes, but also assumes more risk in ownership and operation than if a private enterprise provided disposal.

S&P reviews tip fee per ton and household costs. The tip fee per ton might be relevant to the cost of disposal, but S&P will place more emphasis on total household cost. The review of the tip fee per ton is more applicable to situations where individual government units are paying for disposal from a general fund or tax based on a contractual basis. Where large increases in tip fee costs translate into large increases in disposal costs for such units, their capacity to handle such increases will be analyzed. Household cost should include not only the cost of disposal, but also of collection and transportation to the disposal site. The impact of those cost increases is reviewed for acceptability to the customer and the capacity to pay. The cost under different scenarios are reviewed and measured for the variance under different cases. Large variances caused under different scenarios would raise concern. How cost increase and risks are mitigated are factored into the analysis. If revenues are highly dependent on a secondary revenue stream, such as energy revenues, the risks and the effect on household cost are evaluated. The situation is less financially vulnerable as risks are mitigated and the impact on household cost diminishes.

S&P has broadened the "self-supporting" concept to cover solid waste projects, including resource recovery plants, that are financed with general obligation bonds. Previously, the criteria applied only to G.O. pledges backing enterprise or other public purpose debt and to bonds secured by a "double-barreled pledge." G.O. bonds are considered self-supporting when the enterprise being financed can pay debt service and operating expenses on its own. Consequently, a municipal taxing entity that pledges its full faith and credit to a self-supporting waste enterprise financing can now do so without initially negatively affecting its unlimited

tax G.O. rated debt. This criteria was used to assign an "AAA" rating to Kent County, Michigan's refuse disposal system refunding bonds.

In most cases, solid waste projects will be new enterprises without operating histories. A financing for which self-support is being considered will undergo a complete project analysis. The project will be evaluated on its own merits as if it were a revenue bond financing, without any consideration given to the full faith and credit pledge. If that analysis determines the project or system structure to be investment grade credit quality, then the financing would be considered self-supporting for G.O. debt calculations. This would allow the bonds to be rated based on the higher, full faith and credit pledge. If the analysis determines the project to be speculative grade, then self-support would not

be considered, and this could possibly have a negative impact on the underlying G.O.'s creditworthiness.

For a project to achieve an investment grade determination for self-supporting purposes, a revenue flow should be pledged throughout the project's life. Construction and operational risks must be covered by project revenues without reliance on the additional G.O. pledge. Because a full project analysis is needed for self-support consideration, information should be supplied as if it were a project financing, and sufficient time should be allowed for a full scale project evaluation.

**Key Words:** Cost Reduction; Economics; Efficiency; Incineration; Landfill; Risks; System