Complying with Arbitrage Requirements:
A Guide for Issuers of Tax-Exempt Bonds
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Introduction

This publication is a basic guide to the yield restriction and rebate requirements (arbitrage requirements) of Internal Revenue Code (IRC) Section 148 and related Treasury Regulations (Treas. Reg.). Understanding the arbitrage requirements can help issuers and conduit borrowers comply with their obligations and prevent violations of the arbitrage requirements. The IRS provides information on specific provisions of tax-exempt bond law in IRS publications and on IRS.gov/bonds. Additional resources are listed at the end of this publication.

This publication has seven parts.

- Part I provides basic concepts and definitions that apply to the arbitrage requirements.
- Parts II and III describe the yield restriction and arbitrage rebate requirements, and detail the exceptions to those requirements.
- Part IV provides information on how and when an issuer computes rebate amounts and pays rebate to the U.S. Treasury.
- Part V provides information on accounting for expenditures and allocations.
- Part VI presents a basic example of rebate amount and yield reduction payment calculations.
- Part VII provides additional information on available resources, services and programs to facilitate compliance with the arbitrage requirements.

The publication is not formal guidance and is not intended as an authoritative source. It outlines the general arbitrage rules. It does not address all questions or issues that may arise in complying with the arbitrage requirements, including, for example, special rules that may apply to bond pools, direct pay bonds, tax credit bonds and certain private activity bonds other than qualified 501(c)(3) bonds. This document does not provide details on how to apply the arbitrage requirements to computations. Issuers should review IRC Sections 103 and 148, the related Treas. Reg. and other official guidance on complying with the arbitrage requirements, and consult their legal counsel in appropriate circumstances.

This publication does not address other federal tax requirements that must be met for bonds to be tax-exempt, including those that apply before the bonds are issued and after issuance. Publication 4078, Tax-Exempt Private Activity Bonds, Publication 4079, Tax-Exempt Governmental Bonds, and Publication 4077, Tax-Exempt Bonds for 501(c)(3) Charitable Organizations, provide overviews of federal tax rules that apply post-issuance to tax-exempt private activity bonds, governmental bonds and qualified 501(c)(3) bonds, respectively. Not meeting the federal tax law requirements during the life of tax-exempt bonds may jeopardize their tax-exempt status.

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1 Although conduit issuers may require conduit borrowers to contractually assume responsibility for complying with requirements of the IRC, failure of a bond issue to comply with the requirements may result in the loss of the tax-exempt status of the bonds regardless of any agreement between the parties about compliance responsibilities. Publication 5005, Your Responsibilities as a Conduit Issuer of Tax-Exempt Bonds, includes information for issuers of conduit bonds.
State and local governments receive benefits under the IRC that typically lower borrowing costs on their valid tax-exempt debt obligations. For example, because interest paid to bondholders on tax-exempt obligations is not includable in their gross income for federal income tax purposes, bondholders are willing to accept a lower interest rate than they would if the interest were taxable. These benefits apply to many types of municipal debt financing arrangements including bonds, notes, loans, lease purchase contracts, lines of credit and commercial paper (collectively referred to as “bonds” in this publication). To receive these benefits, issuers must ensure that they meet IRC and Treas. Reg. requirements, generally for as long as the bonds remain outstanding. This means that it’s important that issuers and any users of the bond proceeds regularly monitor how the bond proceeds are being used to ensure continued compliance.

Some of the requirements relate to how bond proceeds are invested. Generally, bonds lose their tax-exempt status if they are arbitrage bonds under IRC Section 148. To be an arbitrage bond, certain monies associated with the bonds are used to acquire investments with a yield above the bond yield. When the investment yield is higher than the bond yield, the excess is called “arbitrage earnings.” But having arbitrage earnings does not automatically mean that the bonds are arbitrage bonds. Bonds must be tested under two independent sets of arbitrage rules to determine if they are arbitrage bonds. If the bonds are arbitrage bonds under either set of rules, they are arbitrage bonds even if they are not arbitrage bonds under the other set.

The two sets of rules that apply to determine whether bonds are arbitrage bonds are:

- The yield restriction rules under IRC Section 148(a), and
- The rebate rules under IRC Section 148(f).

**Yield Restriction Rules** - The yield restriction rules limit the investment yield that may be earned on bond proceeds. Bonds are arbitrage bonds if the issuer expects to invest or actually does invest all or part of the bond proceeds at a yield materially higher than the bond yield. Issuers are permitted to invest in higher yielding investments under certain exceptions. But if no exception applies, the issuer must limit the yield on its investment of bond proceeds to a yield that is not materially higher than the yield on the bonds (yield restrict the investments) or, if permitted, make a yield reduction payment to the U.S. Treasury to prevent its bonds from violating the yield restriction rules. Part II of this publication will describe and list:

1) Which monies are bond proceeds that must be yield restricted,
2) Which investments must be yield restricted,
3) What is a materially higher yield on an investment,
4) When the issuer may reduce the yield on the investment by making “yield reduction payments” to the U.S. Treasury, and
5) Exceptions to the yield restriction rules.

**Rebate Rules** - The arbitrage rebate rules provide that certain arbitrage earnings must be paid, or “rebated,” to the U.S. Treasury. This means that even if an issuer is permitted to invest in higher yielding investments under the yield restriction rules, it may have to rebate those arbitrage earnings to the U.S. Treasury. The yield restriction rules may allow the issuer to earn the arbitrage, but the rebate rules may not allow the issuer to keep the arbitrage. If an issuer is required to pay rebate under these rules, but does not, the bonds are “arbitrage bonds.” The rebate rules include exceptions. Part III of this publication will describe and list:
1) Which monies are proceeds subject to rebate,
2) Which investments are subject to rebate,
3) Certain rules for computing and paying rebate, and
4) Exceptions to the rebate rules.
Part I

Basic Concepts and Definitions that Apply for the Arbitrage Requirements

Before exploring the yield restriction and rebate rules, we’ll explain some basic concepts that apply for the arbitrage requirements.

Definitions

Gross Proceeds - Gross proceeds of a bond issue include proceeds and replacement proceeds.

Proceeds\(^2\) include sale proceeds, investment proceeds and transferred proceeds.

Sale proceeds are amounts the issuer receives from the sale of the bond issue, including amounts used to pay underwriters’ discount and certain accrued interest on the bonds.

Investment proceeds are amounts received from investing proceeds of an issue. For example, if the issuer invests sale proceeds and earns interest, that interest is considered investment proceeds.

Transferred proceeds may result when an issuer issues tax-exempt bonds (the refunding bonds) to refund an outstanding issue of tax-exempt bonds (the refunded bonds). Unspent proceeds of the refunded bonds may transfer to and become proceeds of the refunding bonds, and are no longer considered proceeds of the refunded bonds.

Replacement proceeds\(^3\) are monies that would have been used to finance the project if the bonds had not been issued. Replacement proceeds may also include amounts expected to pay debt service on the bonds, including sinking funds (such as a debt service fund, redemption fund, reserve fund or a replacement fund) and pledged funds (generally meaning any amount pledged to pay principal of or interest on the bonds).

Investment Property\(^4\) includes any security (for example, a share of stock in a corporation), any obligation (for example, debt obligations such as U.S. Treasury obligations and agency bonds), any annuity contract and any other kind of investment-type property (for example, guaranteed investment contracts). Cash is not investment property. For issues of governmental and qualified 501(c)(3) bonds, investments in other tax-exempt governmental bonds and tax-exempt qualified 501(c)(3) bonds (bonds not subject to the Alternative Minimum Tax) are not investment property under IRC Section 148(b)(3). For issues of other types of bonds, no tax-exempt bond is investment property. Consequently, investments in these tax-exempt bonds are not subject to the arbitrage requirements, and earnings received from these bonds are not subject to the yield restriction or rebate requirements.\(^5\) Investment property can be a purpose or nonpurpose investment.\(^6\)

A purpose investment is one acquired for the governmental purpose of an issue. For example, if an issuer issued bonds to make a loan to a 501(c)(3) organization or to fund student loans, the loans the issuer makes to the 501(c)(3) or students are investments but because the bonds were issued for this purpose, these loans are “purpose investments.”

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\(^2\) Treas. Reg. Section 1.148-1(b).
\(^3\) Treas. Reg. Section 1.148-1(c).
\(^4\) IRC Section 148(b)(2).
\(^5\) Treas. Reg. Section 1.148-2(d)(2)(v). Generally, investments in bonds subject to the Alternative Minimum Tax (AMT bonds) made with non-AMT bond proceeds are subject to yield restriction, but investment in AMT bonds made with AMT bond proceeds are not. Similarly, investments in non-AMT bonds made with non-AMT bond proceeds are not subject to yield restriction. See IRC Section 148(b)(3).
\(^6\) Treas. Reg. Section 1.148-1(b).
A **nonpurpose investment** is an investment that is not a purpose investment. For example, if the issuer sells bonds to build a school but invests some of those proceeds while construction is ongoing, the investments are not acquired for the governmental purpose of the issue (construction of the school) so they are nonpurpose investments. Examples of a nonpurpose investment include buying U.S. Treasury notes during the construction period as a temporary investment until the funds are spent on the project, or buying federal agency bonds to hold in a debt service reserve fund.

**Funds and Accounts Descriptions** - Issuers and conduit borrowers create funds and accounts in connection with a bond issue in which bond proceeds are deposited. Below is a description of certain funds and accounts commonly used in tax-exempt bond financings and the typical use of proceeds deposited in each type of fund or account. Frequently, there will be more than one type of fund for a bond issue, and for each type, there may be more than one account. For example, there could be several construction accounts for separate projects within a construction fund.

**Construction fund or project fund** - An issuer or conduit borrower might establish a construction or project fund into which it will deposit bond proceeds to be used to pay costs of the project. This fund might also include proceeds to pay capitalized interest and costs of issuing the bonds (or proceeds for these costs may be held in separate funds or accounts).

**Debt service fund and bona fide debt service fund** - An issuer or conduit borrower might establish a debt service fund to hold revenues or other monies to pay upcoming debt service payments on the bonds. A bona fide debt service fund is used for proper matching of annual revenues and debt service. Revenues are deposited into the fund until needed to pay debt service. The fund generally must be depleted at least once each bond year to qualify as a bona fide debt service fund.7

**Reserve fund and reasonably required reserve or replacement fund** - Reserve funds secure payment of debt service on the bonds in the event the issuer is unable to pay debt service. A reasonably required reserve or replacement fund is a fund in which gross proceeds do not exceed the lesser of:

- 10% of the principal amount of the issue,
- Maximum annual debt service on the bonds, or
- 125% of the average annual debt service on the bonds.8

**Refunding escrow fund** - An issuer might establish a refunding escrow fund to hold monies to be used to pay principal, interest and premium, if any, on one or more prior bond issues (the refunded bonds). These funds might contain proceeds of a refunding issue and possibly other amounts, such as tax receipts or other revenues pledged to pay off the refunded bonds. A refunding escrow may be associated with a current refunding or an advance refunding bond issue.

A **current refunding bond** refunds bonds that are redeemed within 90 days of the refunding bonds being issued.9

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7 Treas. Reg. Section 1.148-1(b). Generally, “bond year” means each one-year period that ends on the day selected by the issuer. The requirements for depletion appear in the definition of “bona fide debt service fund.”
8 Treas. Reg. Section 1.148-2(f)(2)(ii). For a refunding issue, a reserve is reasonably required for purposes of this exception only if the aggregate amount invested in higher yielding investments for both the refunding issue and the refunded issue does not exceed these limits by reference only to the refunding issue (whether or not the proceeds of the refunded issue have become transferred proceeds).
9 Treas. Reg. Section 1.150-1(d)(3).
An **advance refunding bond** refunds bonds that are redeemed more than 90 days after the refunding bonds are issued.\textsuperscript{10}

**Cost of issuance fund** - An issuer or conduit borrower might establish a cost of issuance fund to deposit bond proceeds to be used to pay various costs of issuing bonds. These costs include, but are not limited to, payment for the services of bond counsel, underwriter’s counsel, financial advisor, verification agent, rating agencies and fees for printing offering documents.

\textsuperscript{10} The Tax Cuts and Jobs Act (Public Law No. 115-97, 131 Stat. 2054 (2017)) repealed the exclusion from gross income for interest on bonds issued to advance refund another bond. The repeal applies to advance refunding bonds issued after December 31, 2017. A bond is classified as an advance refunding if it is issued more than 90 days before the redemption of the refunded bonds.
Yield Restriction Requirements and Exceptions

The yield restriction rules provide that bonds are arbitrage bonds if the issuer expects to invest or actually invests all or part of the gross proceeds in investment property having a yield materially higher than the bond yield. The yield restriction rules apply both to purpose and nonpurpose investments. The yield restriction rules provide special treatment when proceeds are used for:

- Certain general uses of the bonds, for example, construction or refunding purposes (some of which may have special exceptions);
- Certain types of investments depending on how the invested funds are intended to be used, for example, a construction or escrow fund may be subject to different definitions of materially higher yield; and
- Certain classes of investments (yield is computed separately for purpose and nonpurpose investments).

To follow the yield restriction requirements, the issuer or conduit borrower must correctly treat all investments based on the general uses of the bonds and the type and class of the investment.

Materially Higher Yield

The yield restriction rules limit investment yield on gross proceeds. Gross proceeds invested at a yield materially higher than the bond yield will result in the bonds being arbitrage bonds.\(^{11}\) Generally, an investment yield is materially higher if it exceeds the bond yield by more than \(\frac{1}{8}\) of \(1\%\);\(^{12}\) however, the definition of materially higher can differ depending on the type and class of investment and the general uses of the bonds.\(^{13}\)

<table>
<thead>
<tr>
<th>Cases in which a different definition of “materially higher” applies</th>
<th>Investment yield is materially higher if it exceeds the bond yield by more than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceeds held in an advance refunding escrow</td>
<td>(1/1000) of (1%)(^{14})</td>
</tr>
<tr>
<td>Replacement proceeds</td>
<td>(1/1000) of (1%)(^{15})</td>
</tr>
</tbody>
</table>

For example, if a fixed-yield bond issue has a yield of 5\%, the investment yield on an advance refunding escrow or on replacement proceeds is not materially higher if the yield of the investments is not greater than 5.001\%.

Yield Reduction Payments

In certain cases, an issuer can make a payment to the U.S. Treasury to reduce the yield on an investment (a yield reduction payment). In this case, an issuer may invest proceeds at a materially higher yield, but by paying the yield reduction payment, the issuer causes the investment yield to be treated within the permitted yield. Yield reduction payments may only be made for certain types of investments and certain types of proceeds.\(^{16}\) Generally, a yield reduction payment is made at the same time and in the same manner as a rebate payment by

\(^{11}\) IRC Section 148(a) and Treas. Reg. Section 1.148-2(a).
\(^{13}\) Treas. Reg. Section 1.148-2(d)(2)(i). If yield-restricted investments in the same class are subject to different definitions of materially higher, the definition of materially higher that produces the lowest permitted yield applies to all the investments in the class.
\(^{16}\) Treas. Reg. Section 1.148-5(c)(3).
Yield Computation Done for Entire Class of Investments

In figuring whether investments acquired with gross proceeds have a materially higher yield, combine similar investments into three classes\(^\text{18}\) and compute the yield for each class. Class A includes all purpose investments that are subject to certain yield restriction limits. Class B includes the nonpurpose investments subject to yield restriction after the temporary period. Class C consists of all other nonpurpose investments.

Illustration of classes of investments and their arbitrage requirements

Note that nonpurpose investments not subject to yield restriction are subject to the rebate requirements. This means that during the temporary period Class B investments are subject to rebate requirements, even though they aren’t subject to yield restriction requirements until a later date. In this illustration, the Class B investments could be a construction fund while the Class C investments could be a reasonably required reserve fund.

Exceptions to Yield Restriction Rules

The exceptions to the yield restriction requirement are for gross proceeds:

- Held during “temporary periods,”\(^\text{19}\)
- Held in a “reasonably required reserve or replacement fund,”\(^\text{20}\) or
- Representing a “minor portion.”\(^\text{21}\)

Remember, if an exception applies, the issuer may invest the bond proceeds covered by the exception at an unrestricted yield, but those proceeds might be subject to the rebate requirements. For example, bond proceeds deposited in a reasonably required reserve or replacement fund are subject to rebate requirements even though an issuer can invest those proceeds at an unrestricted yield under a specific exception to the yield restriction requirements. This is an example of how an issuer may earn arbitrage, but may not keep it.

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\(^{17}\) Treas. Reg. Section 1.148-5(c)(2).


\(^{19}\) IRC Section 148(c).

\(^{20}\) IRC Section 148(d).

\(^{21}\) IRC Section 148(e).
Temporary Period Exceptions - Exceptions Subject to a Time Limit

During a “temporary period,” the issuer may invest bond proceeds at an unrestricted yield without causing the bonds to be arbitrage bonds under the yield restriction rules. The length of the “temporary period” depends on the purpose (use) for which the bonds are issued and the type of investment (or fund) that holds the proceeds.

3-Year Temporary Period for Capital Projects

A 3-year temporary period is available for bond proceeds deposited in a construction or project fund when those proceeds are expected to be allocated to acquisition or construction costs of a capital project. The temporary period begins on the date the bonds are issued and ends 3 years later. The 3-year temporary period may be extended another 2 years for a total of 5 years if the issuer and a licensed architect or engineer certify that more than 3 years are necessary to complete the capital project. This fund is made up of the net sale proceeds and investment proceeds.

The 3-year temporary period applies as long as the issuer reasonably expects as of the issue date to:

- Allocate at least 85% of the bond’s net sale proceeds for expenditures on the capital project within three years of the bond’s issue date,
- Have a binding obligation to a third party within six months of the bond’s issue date to allocate at least 5% of the net sale proceeds to expenditures for the capital project, and
- Proceed toward completing the project and allocating the net sale proceeds to expenditures with due diligence.

Other Temporary Periods

Other temporary period exceptions to the yield restriction requirements include:

1) 13-month temporary period exceptions for bona fide debt service funds and working capital expenditures. The 13-month temporary period may be extended to the maturity date for issues that are tax and revenue anticipation notes (TRANs) if certain requirements are met.

2) 1-year temporary period for investment proceeds.

3) 90-day temporary period for certain current refundings. The temporary period for current refunding proceeds, other than transferred proceeds, is generally 90 days.

4) 30-day temporary periods for replacement proceeds, advance refunding proceeds and other proceeds. Replacement proceeds qualify for a 30-day temporary period. The temporary period for proceeds (other than transferred proceeds) of an advance refunding issue is generally 30 days. Gross proceeds not qualifying for any other special temporary period exception qualify for a 30-day temporary period exception from date of receipt.

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22 See Part V for a discussion of what it means to allocate to expenditures.
23 “Net sale proceeds” of a bond issue are the sale proceeds reduced by those sale proceeds deposited in a “reasonably required reserve or replacement fund” and proceeds invested as part of a “minor portion.” Treas. Reg. Section 1.148-1(b).
28 Treas. Reg. Section 1.148-9(d)(2)(ii)(A) and (B).
29 Treas. Reg. Section 1.148-9(d)(2)(i). This 30-day temporary period ends 30 days after the date the advance refunding bonds are issued.
**Start of Temporary Period**

Most temporary periods begin on the bond’s issue date. Other temporary periods begin after the issue date, such as when proceeds are received or earned (for example, investment earnings), allocated to the bonds (for example, replacement proceeds deposited in a sinking fund) or first treated as replacement proceeds.\(^{31}\) Certain temporary periods for repayments of loans made with proceeds begin on the date of the repayment.

**Temporary Periods and Refunding Bonds**

For proceeds that are transferred proceeds of a refunding issue, the temporary period generally begins on the date of transfer of the proceeds and ends when it would have otherwise ended if the proceeds had remained proceeds of the refunded bonds.\(^{32}\) However, in an advance refunding, for example, the 3 or 5-year temporary period for capital projects or the 13-month temporary period for working capital for the proceeds of the prior issue ends on the issue date of the advance refunding issue.\(^{33}\)

**Yield Restriction Exceptions Having No Time Limit**

The following exceptions to the yield restriction rules apply throughout the life of the bond issue. If one of these exceptions applies, the yield restriction limitations do not apply to the proceeds or funds described in the exception.

1) Reasonably required reserve or replacement fund.\(^{34}\)

2) Minor portion exception - This exception applies to proceeds in an amount which is the lesser of $100,000 or 5% of the sale proceeds of the issue.\(^{35}\)

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\(^{31}\) Treas. Reg. Section 1.148-2(e)(5).


\(^{35}\) Treas. Reg. Section 1.148-2(g).
Rebate Requirements and Exceptions

Under IRC Section 148(f), bonds are arbitrage bonds if an issuer does not make rebate payments to the U.S. Treasury in the amounts and at the times required. The issuer must rebate the amount by which the yield on investment property acquired with proceeds of the issue exceeds the yield on the bonds. The rebate requirements apply only to nonpurpose investments. Purpose investments are not subject to the rebate rules.

The rebate rules generally provide that issuers must periodically calculate arbitrage earnings and, unless an exception applies, pay those earnings to the U.S. Treasury within 60 days after the computation date for the period. While issuers have flexibility in determining the computation periods, an issuer must compute and pay any required rebate at least once every five years. Payments must be made by filing Form 8038-T, Arbitrage Rebate, Yield Reduction and Penalty in Lieu of Arbitrage Rebate. Parts IV and VI include more information about the rebate calculation and examples of this calculation.

Exceptions to the Rebate Requirements

Exceptions to the rebate requirements may apply based on how quickly the issuer spends the bond proceeds, the size of the issuer and the category of proceeds being invested. Some of these exceptions apply only to certain types of bonds (for example, governmental bonds) and some of these exceptions apply only to proceeds in certain funds. For exceptions applying to specific types of funds, the issuer’s allocation of proceeds to these funds is important to determine whether a particular exception’s requirements are met. The purposes and uses of the proceeds in a fund and the purpose of the bond issue control whether an exception applies, regardless of the label of the fund.

The two general exception categories to the rebate requirements are the spending exceptions and the special exceptions.

The following chart illustrates certain funds and exceptions that may be available for proceeds held in those funds.

| Generic Types of Accounts (Funds) and Available Exceptions to Rebate | Type of Fund Containing Bond Proceeds |
|---|---|---|---|---|---|
| Exceptions | Refunding Escrow Fund | Construction or Project Fund | Costs of Issuance Fund | Reserve Fund | Debt Service Fund (DSF) |
| 6-Month |  |  |  |  |  |
| 18-Month |  |  |  |  |  |
| 2-Year |  |  |  |  | Limited |
| Bona Fide DSF |  |  |  |  |  |
| Working Capital |  |  |  |  |  |
| Small Issuer |  |  |  |  |  |

a Or Working Capital Fund
b Proceeds used for issuance costs are eligible for the 2-year spending exception if they meet the requirements under Treas. Reg. Section 1.148-7(i)(4).

c A reasonably required reserve or replacement fund can only be excluded from the rebate requirement under the two-year spending exception through the earlier of the close of the two year period or the date the construction is substantially completed under IRC Section 148(f)(4)(C)(vi)(II).
Spending Exceptions

The three spending exceptions are the:

- 6-month spending exception,
- 18-month spending exception, and
- 2-year spending exception.

If an issuer satisfies a spending exception, proceeds in the eligible funds will be exempt from the rebate requirements.

The spending exceptions depend on an issuer allocating certain proceeds to expenditures within specified time periods. To determine whether these exceptions apply, it is necessary to identify:

- Which proceeds the issuer allocated to expenditures, and
- When the issuer allocated those proceeds.

Part V provides information on accounting for expenditures and allocations.

6-Month Spending Exception

If the requirements of the 6-month spending exception are met, the issue is treated as satisfying the rebate requirements for the proceeds meeting that exception. This means that earnings on investments of certain gross proceeds of the issue that exceed the yield on the issue don’t need to be paid as rebate to the U.S. Treasury. Generally, the issuer must meet both the following requirements:

1) The issuer must allocate the gross proceeds to expenditures for the governmental purposes of the issue within the 6-month period beginning on the issue date. For this purpose, gross proceeds do not include gross proceeds:

   a) Held in a bona fide debt service fund or a reasonably required reserve or replacement fund,
   b) Not previously anticipated to become gross proceeds but that become gross proceeds after the end of the 6-month spending period,
   c) That are proceeds derived from any purpose investment of the issue, and
   d) That are repayments of certain grants financed by the issue.

   If the issue is a governmental bond issue other than TRANs or if the issue is qualified 501(c)(3) bonds, the 6-month time period is extended to one year for a limited amount of gross proceeds.

2) The issuer meets the rebate requirements for the issue’s proceeds (excluding earnings on amounts in any bona fide debt service fund) not covered by the 6-month exception.

When an issuer satisfies the requirements for the 6-month spending exception, it may retain earnings on only the gross proceeds specifically described by the exception. The 6-month spending exception does not create an exception for amounts in a reasonably required reserve or replacement fund or for unanticipated gross proceeds that appear after the 6-month period.

TRANs are treated as meeting the 6-month spending exception for the issue’s net proceeds and any investment earnings on those net proceeds if the issuer meets certain IRC requirements.

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36 IRC Section 150(a)(3).
37 IRC Section 148(f)(4)(B)(iii).
18-Month Spending Exception

An issuer satisfying the requirements of the 18-month spending exception may retain certain investment earnings during that 18-month period starting on the issue date. The three requirements are:

1) The issuer must allocate gross proceeds to expenditures for a governmental purpose of the bonds under the following schedule, with the periods starting on the issue date of the bonds:
   a) At least 15% of the proceeds are allocated within 6 months,
   b) At least 60% within 12 months, and
   c) 100% within 18 months.

The spending requirement for the third period allows for a limited amount of unspent proceeds in connection with reasonable retainage (retention to ensure compliance with a construction contract), if the reasonable retainage is allocated to expenditures within 30 months of the issue date. An issuer’s failure to meet the spending requirements will be disregarded if the issuer exercised due diligence to complete the financed project and the amount of the proceeds that didn’t meet the schedule doesn’t exceed the lesser of 3% of the bond’s issue price or $250,000. As with the 6-month spending exception, gross proceeds has a special definition for applying the spending schedule.

2) The issuer must meet the rebate requirement for all proceeds not required to be spent within the 18-month spending period (excluding earnings on a bona fide debt service fund).

3) All the bond’s gross proceeds, as defined for the 18-month spending exception, must also qualify for the 3-year temporary period available under the yield restriction requirements.

As is the case for the 6-month spending exception, the 18-month spending exception does not create an exception for amounts in a reasonably required reserve or replacement fund. The 18-month spending exception also doesn’t apply to a bond issue any portion of which is treated as meeting the rebate requirement under the 2-year construction spending exception.

2-Year Spending Exception

The 2-year spending exception applies only to non-refunding construction issues that finance property owned by a governmental unit or a 501(c)(3) organization. To qualify as a construction issue, the issuer must reasonably expect, as of the issue date, that at least 75% of the “available construction proceeds” of the issue will be allocated to construction expenditures. If the issue meets the requirements of the 2-year construction spending exception, then the issue is treated as meeting the rebate requirements for available construction proceeds—with the result that arbitrage earnings on investments of those proceeds are not required to be paid to the U.S. Treasury.

38 Treas. Reg. Section 1.148-7(d)(2) and Treas. Reg. Section 1.148-7(h).
41 Treas. Reg. Section 1.148-7(d)(4).
42 The term “available construction proceeds” is defined in IRC Section 148(f)(4)(C)(vi) and Treas. Reg. Section 1.148-7(l).
43 Treas. Reg. Section 1.148-7(g).
Generally, an issuer meets the requirements of the 2-year spending exception if it allocates available construction proceeds to expenditures for governmental purposes of the issue according to the following schedule (with periods starting on the issue date):

1) At least 10% of the proceeds are allocated within 6 months,
2) At least 45% within 1 year,
3) At least 75% within 18 months, and
4) 100% within 2 years.

The spending requirement for this fourth and final period allows limited unspent proceeds for reasonable retainage (retention to ensure compliance with a construction contract), if the reasonable retainage is allocated to expenditures within 3 years of the issue date. If the issuer doesn’t meet the requirements of the final spending period, there is an exception if:

1) The unspent proceeds do not exceed the lesser of 3% of the issue price or $250,000, and
2) The issuer exercises due diligence to complete the project.

An issuer of a construction issue may elect by the issue date to pay a “penalty in lieu of rebate” under the 2-year construction spending exception.

**Special Exceptions**

Two additional exceptions to the rebate requirement are the small issuer exception for governmental bonds and the bona fide debt service fund exception.

**Small Issuer Exception**

A governmental unit that does not expect to issue more than $5 million of tax-exempt governmental bonds in a calendar year might be eligible for an exception from the rebate requirements for proceeds of a governmental bond issue issued during that calendar year.

The limit is increased to $15 million for bonds issued to finance construction of public school facilities. To determine the amount of bonds that will be issued, the issuer must include certain additional tax-exempt governmental bonds issued by any:

- Entity (other than political subdivisions) that issues bonds on behalf of the issuer; and
- Subordinate entity (for example, an entity that is directly or indirectly controlled by the issuer, per Treas. Reg. Section 1.150-1(e)).

The issuer must also include any bonds issued by an entity formed or otherwise used to avoid the amount limitation. An issuer may exclude certain refunding bonds when computing the limit.

In addition to the limit on the amount of governmental bonds that an issuer expects to issue, an issue must meet these requirements to qualify for the small issuer exception:

1) The issue is issued by a governmental unit with general taxing powers, and
2) 95% or more of the proceeds of the issue (other than those in a reasonably required reserve or replacement fund) are to be used for the issuer’s local governmental activities.

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44 IRC Section 148(f)(4)(C)(iii), Treas. Reg. Section 1.148-7(e)(2) and Treas. Reg. Section 1.148-7(h).
45 Treas. Reg. Section 1.148-7(b)(4).
46 IRC Section 148(f)(4)(C)(vii) and Treas. Reg. Section 1.148-7(k).
47 IRC Section 148(f)(4)(D).
48 IRC Section 148(f)(4)(D)(vii).
49 IRC Section 148(f)(4)(D)(v).
50 IRC Section 148(f)(4)(D)(v).
51 An issuer does not have general taxing power if the issuer’s ability to tax is contingent on approval by another governmental unit. Treas. Reg. Section 1.148-8(b). See also, IRC Section 148(f)(4)(D)(iv).
**Bona Fide Debt Service Fund Exception**

Certain earnings on bona fide debt service funds are exempt from the rebate requirement if the issue meets either of the following criteria:

1) The gross earnings on the fund for a bond year are less than $100,000. The issue meets this requirement if the issue has an average annual debt service not greater than $2,500,000.

2) The issue consists of governmental bonds, the issue has an average maturity of at least five years, and the bonds bear interest at a fixed rate.

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52 IRC Section 148(f)(4)(A)(ii).
53 Treas. Reg. Section 1.148-3(k).
54 IRC Section 148(f)(4)(A).
Rebate Amounts and Payments

The rebate rules require that certain arbitrage earnings (rebate) be paid to the U.S. Treasury. Generally, an issuer must compute and pay rebate owed at least once every five years over the life of the bond issue.\(^55\) Within that five-year period, issuers have some flexibility choosing the date they use to compute rebate. The final computation date, however, is the date the bond issue is fully discharged.

On a computation date, if the issuer determines that it owes rebate, it files a Form 8038-T, Arbitrage Rebate, Yield Reduction and Penalty in Lieu of Arbitrage Rebate, with the IRS and pays the required rebate amount generally within 60 days of the computation date. For computation dates other than the final computation date, the issuer must pay at least 90% of the rebate owed, taking into account previous rebate payments. The final payment for the final computation date must be 100% of the rebate amount less previous payments.

Computation of Rebate Amounts

The rebate payment is based on the “rebate amount” on the computation date. The rebate amount reflects the investment yield earned on nonpurpose investments in excess of the amount these would have earned if invested at the bond yield. Because payments for, and receipts on, an investment can happen at different times, an issuer must future value the receipts and payments to a single date in making a rebate computation. The rebate amount as of each computation date reflects a snapshot of actual and allowable investment earnings as of those computation dates over the life of the bonds. The past receipts on, and payments for, the investments are future valued at the bond yield to give their value as of the computation date, using the same compounding interval and financial conventions used to compute the yield on the issue.\(^56\) The rebate amount is the amount by which the value of all the receipts exceeds the value of all the payments on the computation date.\(^57\) The rebate payment is determined by reducing the rebate amount by any previous rebate the issuer paid, which is also future valued to that computation date. Amounts the issuer pays as yield reduction payments on nonpurpose investments are treated as payments for the investment that are considered in computing rebate. Other payments that are considered in computing the rebate amount include:

- Amounts paid to acquire a nonpurpose investment;
- The value of a previously acquired investment that becomes allocated to an issue; and
- A computation credit on the last day of each bond year during which there are nonpurpose investments subject to the rebate requirements and on the final maturity date.\(^58\)

Receipts include:

- Amounts received from a nonpurpose investment, such as earnings and return of principal;
- The value of a nonpurpose investment that is no longer allocated to an issue, or is no longer subject to the rebate requirement, before its disposition or redemption date; and
- The value of a nonpurpose investment held at the end of a computation period.

\(^{55}\) IRC Section 148(f)(3) and Treas. Reg. Section 1.148-3(f)(1).
\(^{56}\) Treas. Reg. Section 1.148-3(c).
\(^{57}\) Treas. Reg. Section 1.148-3(b).
\(^{58}\) Treas. Reg. Section 1.148-3(d)(1)(iv) and Treas. Reg. Section 1.148-3(d)(4). These regulations provide a computation credit of $1,400 for bond years ending in 2007, with annual adjustments for inflation thereafter, for bonds sold on or after October 17, 2016. An issuer may also apply these regulations to bonds sold before October 17, 2016, with the increased computation credit applying to bond years ending on or after July 18, 2016. A similar credit is available for bond years ending on or after September 26, 2007, under proposed regulations issued in 2007. REG-106143-07, 72 FR 54606, 54611, 2007-43 IRB 881, 887.
Recovering an Overpayment of Rebate

Because rebate is computed by looking at receipts and payments from issuance to the computation date, it’s possible that an issuer pays rebate for a computation date (because the value of the receipts exceeded the value of the payments as of that date), but finds that on a subsequent computation date, the value of the payments exceeds the value of the receipts so that the rebate amount is reduced or eliminated. In this case, the issuer’s earlier rebate payment exceeds the rebate amount as of the subsequent computation date because of investment results after the earlier computation date. An issuer can get a refund of the overpayment in certain circumstances. The issuer determines the amount of overpayment by using the future value method to calculate rebate amount (excluding any rebate payments). The overpayment is the excess of the amount of rebate the issuer paid over the sum of the rebate amount for the issue as of the most recent computation date and all amounts that the issuer is otherwise required to pay under IRC Section 148, as of the date the recovery is requested.\textsuperscript{59} An issuer requests a refund by completing and filing Form 8038-R, Request for Recovery of Overpayments Under Arbitrage Rebate Provisions. An issuer must file the form no later than two years after the final computation date for the issue.\textsuperscript{60}

\textsuperscript{59} Treas. Reg. Section 1.148-3(i).
\textsuperscript{60} Treas. Reg. Section 1.148-3(i)(3)(i).
Proceeds are no longer subject to the arbitrage requirements when they are properly allocated to an appropriate expenditure. To make these allocations, issuers must follow special rules and maintain adequate records. If an issuer improperly treats bond proceeds as allocated to an expenditure, it may miscalculate the rebate amount, fail to adequately restrict investment yield, or fail to satisfy the requirements for a spending exception or temporary period. By properly recording, monitoring and tracking allocations of bond proceeds, issuers can stay in compliance with the arbitrage requirements.

Generally, proceeds are no longer proceeds of an issue when they are allocated to an expenditure for a governmental purpose or are deallocated from the bond issue because of the transferred proceeds or universal cap rules.\(^61\) Proceeds may be allocated to an expenditure using any reasonable, consistently applied accounting method for an issue’s gross proceeds, investments and expenditures.

There are special rules and time limits for making allocations, but in general, to allocate gross proceeds to an expenditure, an issuer must reasonably expect an outlay of cash not later than five banking days after it allocates gross proceeds to that expenditure.\(^62\) Payment of gross proceeds of an issue to a related party of the payor is not an expenditure of those gross proceeds. An issuer must make its allocations no later than 18 months after the later of the date when the expenditure is paid or the project is placed in service, and in any event no later than the date the first rebate payment would be due (that is, the earlier of (i) 60 days after the fifth anniversary of the date the bonds were issued or (ii) 60 days after the date the issue is retired).\(^63\)

If the project is funded with tax-exempt bond proceeds and another source of funds, there may be questions about which sources of funds were used for which expenditures. Here again, the issuer may use any reasonable, consistently applied accounting method for gross proceeds and other funds. Examples of reasonable accounting methods\(^64\) an issuer may use include:

1) **Specific tracing** - bond proceeds are allocated to the specific expenditures actually paid with the proceeds.

2) **Gross proceeds spent first** - bond proceeds are allocated to the earliest expenditures.

3) **First-in, first-out** - the source allocated to the expenditure is based on the order in which each source becomes available.

4) **Ratable allocation** - funds from each source are allocated to each of the expenditures ratably.

If an issuer doesn’t have sufficient books and records to establish an accounting method for a bond issue and allocation of proceeds of that issue, specific tracing applies for the yield restriction and rebate rules.\(^65\)

Specific rules apply for accounting for purpose investments, certain working capital (“proceeds spent last” method), grants, reimbursements and commingled funds.

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\(^{61}\) Treas. Reg. Section 1.148-6(b)(1). For more information on the universal cap rules, see Treas. Reg. Section 1.148-6(b)(2).

\(^{62}\) Treas. Reg. Section 1.148-6(d)(1)(i).

\(^{63}\) Treas. Reg. Section 1.148-6(d)(1)(ii).

\(^{64}\) Treas. Reg. Section 1.148-6(d)(1)(iii).

\(^{65}\) Treas. Reg. Section 1.148-6(d)(1)(i).
Part VI

Example of Calculation of Rebate Amount and Yield Restriction Analysis

The following is an example to demonstrate the application of basic concepts of the yield restriction and rebate requirements.

Facts: $49,000,000 variable yield bond issue with an issue date of January 1, 1994. The bond issue’s first interim computation date is January 1, 1999. The bond yield calculated for the first computation period is 7.00%.

In this example, the issuer received $49,000,000 in gross proceeds from the sale of bonds, and on the issue date applied $41,000,000 to purchase a U.S. Treasury note investment with an annual coupon yield of 7.53% and $8,000,000 to purchase a U.S. Treasury money fund investment bearing an annual interest rate of 4.97%. In this example, receipts from investments, unless reinvested, are disbursed immediately for the governmental purpose of the bonds.

The investment transactions used in this example are categorized as either payments or receipts. The general types of investment transactions, and their treatment, appear in the following chart. Within a typical computation of the rebate amount (or yield reduction payment), payments are represented by a negative number (monies going out) and receipts by a positive number (monies coming in).

<table>
<thead>
<tr>
<th>Payments</th>
<th>Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Purchase)</td>
<td>Maturity</td>
</tr>
<tr>
<td>(Accrued interest)</td>
<td>Sale</td>
</tr>
<tr>
<td>(Premium)*</td>
<td>Accrued interest</td>
</tr>
<tr>
<td>Discount*</td>
<td>Gain*</td>
</tr>
<tr>
<td>(Value at initial allocation)</td>
<td>(Loss)*</td>
</tr>
<tr>
<td>(Prior period value)</td>
<td>Interest</td>
</tr>
<tr>
<td>(Prior period rebate amount, if negative)</td>
<td>Dividends</td>
</tr>
<tr>
<td>(Computation credit)**</td>
<td>Value at end of allocation</td>
</tr>
<tr>
<td>(Yield reduction payment)</td>
<td>End of period value</td>
</tr>
<tr>
<td></td>
<td>Prior period rebate amount, if positive</td>
</tr>
</tbody>
</table>

*These are only used as adjustments if the par value of an investment is used to represent the purchase, maturity or sale of an investment.

**Excluded from payments for purposes of computing yield reduction payments.

66 See the discussion of computation dates in Part IV.
67 For ease of illustration, all transactions (purchases and sales) of the note and the fund are at par and interest payments on the fund only occur on dates when there are purchases or sales. Transaction totals are rounded to whole dollar amounts.
The accounting entries for payments and receipts on the note investment are shown in Table 1. The note purchase is shown as a $41,000,000 payment on January 1, 1994. The semiannual interest payments received on the note on each January 1 and July 1 are reflected as receipts. Sales of portions of the note occur periodically on January 1, 1995, September 1, 1995, and March 1, 1996, and are also reflected as receipts.

Table 1

<table>
<thead>
<tr>
<th>Date</th>
<th>Buy Payment (-)</th>
<th>Sell Receipt (+)</th>
<th>Interest Receipt (+)</th>
<th>Investment Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td>(41,000,000)</td>
<td>41,000,000</td>
<td>1,543,650</td>
<td>41,000,000</td>
</tr>
<tr>
<td>02/01/94</td>
<td>41,000,000</td>
<td></td>
<td></td>
<td>41,000,000</td>
</tr>
<tr>
<td>05/01/94</td>
<td>41,000,000</td>
<td></td>
<td></td>
<td>41,000,000</td>
</tr>
<tr>
<td>07/01/94</td>
<td>1,780,000</td>
<td>1,543,650</td>
<td></td>
<td>39,220,000</td>
</tr>
<tr>
<td>07/01/95</td>
<td>1,476,633</td>
<td></td>
<td></td>
<td>39,220,000</td>
</tr>
<tr>
<td>09/01/95</td>
<td>18,275,000</td>
<td>231,844</td>
<td></td>
<td>20,945,000</td>
</tr>
<tr>
<td>01/01/96</td>
<td>788,579</td>
<td>2,966,230</td>
<td></td>
<td>20,945,000</td>
</tr>
<tr>
<td>03/01/96</td>
<td>788,586</td>
<td>20,945,000</td>
<td>259,971</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2 illustrates the accounting entries for payments and receipts on the fund investment. The purchase of the initial investment in the fund is shown as an $8,000,000 payment on January 1, 1994. Purchases of subsequent investments in the fund (representing immediate reinvestment in the fund of all receipts from interest earnings on the note and the fund on each date) are reflected as additional payments on July 1, 1994, July 1, 1995, and January 1, 1996. The periodic interest payments received on the fund are reflected as receipts. Sales of portions of the fund occur on February 1, 1994, May 1, 1994, January 1, 1995, September 1, 1995, and March 1, 1996, which are also reflected as receipts.

Table 2

<table>
<thead>
<tr>
<th>Date</th>
<th>Buy Payment (-)</th>
<th>Sell Receipt (+)</th>
<th>Interest Receipt (+)</th>
<th>Investment Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td>(8,000,000)</td>
<td>2,966,230</td>
<td>33,770</td>
<td>5,033,770</td>
</tr>
<tr>
<td>02/01/94</td>
<td>4,938,996</td>
<td>61,004</td>
<td></td>
<td>94,774</td>
</tr>
<tr>
<td>07/01/94</td>
<td>(1,544,437)</td>
<td>787</td>
<td></td>
<td>1,639,212</td>
</tr>
<tr>
<td>07/01/95</td>
<td>1,635,279</td>
<td>41,071</td>
<td></td>
<td>3,932</td>
</tr>
<tr>
<td>01/01/95</td>
<td>(1,476,730)</td>
<td>97</td>
<td></td>
<td>1,480,662</td>
</tr>
<tr>
<td>09/01/95</td>
<td>1,480,655</td>
<td>12,500</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>01/01/96</td>
<td>(788,579)</td>
<td>0</td>
<td></td>
<td>788,586</td>
</tr>
<tr>
<td>03/01/96</td>
<td>788,586</td>
<td>6,443</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

(11,809,746) 11,809,746 155,672
Table 3 combines the amounts of payments and receipts for each date from Table 1 and Table 2 to summarize the payments and receipts included in the computation of rebate amount and the computation of yield on investment. The total payments column represents the sum of payments for purchases of the note and the fund, represented as negative amounts. The total receipts column represents the sum of receipts from investment earnings on and sales of the note and the fund, represented as positive amounts. The net payments and receipts column is the sum of the payments and receipts columns.

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Payments (-)</th>
<th>Total Receipts (+)</th>
<th>Net Payments and Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td>(49,000,000)</td>
<td>0</td>
<td>(49,000,000)</td>
</tr>
<tr>
<td>02/01/94</td>
<td>0</td>
<td>3,000,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>05/01/94</td>
<td>0</td>
<td>5,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>07/01/94</td>
<td>(1,544,437)</td>
<td>1,544,437</td>
<td>0</td>
</tr>
<tr>
<td>01/01/95</td>
<td>0</td>
<td>5,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>07/01/95</td>
<td>(1,476,730)</td>
<td>1,476,730</td>
<td>0</td>
</tr>
<tr>
<td>09/01/95</td>
<td>0</td>
<td>20,000,000</td>
<td>20,000,000</td>
</tr>
<tr>
<td>01/01/96</td>
<td>(788,579)</td>
<td>788,579</td>
<td>0</td>
</tr>
<tr>
<td>03/01/96</td>
<td>0</td>
<td>22,000,000</td>
<td>22,000,000</td>
</tr>
<tr>
<td></td>
<td>(52,809,746)</td>
<td>58,809,746</td>
<td>6,000,000</td>
</tr>
</tbody>
</table>

Generally, on dates when investments mature or are sold, or interest earnings are received, a receipt is included in the calculation of rebate amount. On dates when investments roll over or are purchased, or interest earnings are reinvested, a payment is included in the calculation of rebate amount. The payments and receipts on a corresponding date offset each other and the daily net total is included in the calculation of rebate amount.

**Rebate Amount Calculation**

Table 4 illustrates the calculation of rebate amount for the January 1, 1999, computation date based on the net payments and receipts column from Table 3 and the permitted computation credit on the last day of each bond year during which there are amounts allocated to gross proceeds of an issue subject to the rebate requirement. The rebate amount for the computation date is calculated as the sum of the future values of each payment, receipt and computation credit as of the computation date using the bond yield (7.00% per year) as the rate of return in the future value computation. The rebate amount as of January 1, 1999, is $452,432.

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Prior to 2007, the amount of the computation credit available under Treas. Reg. Section 1.148-3(d)(1)(iv) was $1,000. See also footnote 58 for more information on the increase in the computation credit.
Table 4

<table>
<thead>
<tr>
<th>Date</th>
<th>Net Payments and Receipts</th>
<th>Future Value at Bond Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td>(49,000,000)</td>
<td>(69,119,339)</td>
</tr>
<tr>
<td>02/01/94</td>
<td>3,000,000</td>
<td>4,207,602</td>
</tr>
<tr>
<td>05/01/94</td>
<td>5,000,000</td>
<td>6,893,079</td>
</tr>
<tr>
<td>07/01/94</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>01/01/95</td>
<td>5,000,000</td>
<td>6,584,045</td>
</tr>
<tr>
<td>01/01/95</td>
<td>(1,000)</td>
<td>(1,317)</td>
</tr>
<tr>
<td>07/01/95</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>09/01/95</td>
<td>20,000,000</td>
<td>25,155,464</td>
</tr>
<tr>
<td>01/01/96</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>01/01/96</td>
<td>(1,000)</td>
<td>(1,229)</td>
</tr>
<tr>
<td>03/01/96</td>
<td>22,000,000</td>
<td>26,735,275</td>
</tr>
<tr>
<td>01/01/97</td>
<td>(1,000)</td>
<td>(1,148)</td>
</tr>
</tbody>
</table>

452,432

Table 4 demonstrates that the rebate amount is $452,432 as of the January 1, 1999, computation date. The issuer must submit a rebate payment of at least 90% of this amount within 60 days of this interim computation date by filing Form 8038-T and including the required payment. If January 1, 1999 was the final computation date, the issuer must submit 100% of the rebate amount.

**Yield Restriction Analysis**

An issuer determines whether it has complied with the yield restriction requirements by comparing the yield on investment with the maximum yield that is not materially higher than the yield on the bond issue. The issuer should include all unconditionally payable receipts and all unconditionally payable payments.

**Computation of Yield Reduction Payments**

For certain investments, an issuer can make yield reduction payments (including rebate payments) to the U.S. Treasury that reduce the yield on the investments for the yield restriction requirements. For an eligible investment class, an issuer must pay the amount that will result in the yield on that class not being materially higher than the bond yield.

The example below assumes that the bond issue is entitled to the general 30-day temporary period and the general 1/8th of 1% materially higher yield limit.

Table 5 shows the payments for and receipts from investments in the note and the fund. The amounts entered for January 31, 1994 (the first day after the end of the general 30-day temporary period) are the values of the investments as of that date for the note and the fund, originally purchased on January 1, 1994. As permitted under the arbitrage requirements, the issuer values the note at present value and the fund at fair market value (essentially par plus accrued interest). The yield restriction requirements provide for certain temporary periods during which yield restriction does not apply. Consequently, the initial temporary period is not included in the determination of yield on investment. The result is that instead of the calculation starting on the issue date, it starts when the temporary period ends.
Table 5

<table>
<thead>
<tr>
<th>Date</th>
<th>Value Payment (-)</th>
<th>Sell Receipt (+)</th>
<th>Interest Receipt (+)</th>
<th>U.S. Treasury Note 7.530%</th>
<th>Value/Buy Payment (-)</th>
<th>Sell Receipt (+)</th>
<th>Interest Receipt (+)</th>
<th>U.S. Treasury Money Fund 4.970%</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/31/94</td>
<td>(41,245,085)</td>
<td>(8,032,681)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02/01/94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05/01/94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/01/94</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/01/95</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/01/95</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/01/95</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/01/96</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/01/96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 summarizes the payments and receipts from Table 5 included in the computation of yield on investment. The total payments column represents the sum of payments from the value of investments (as of January 31, 1994) and purchases of the fund. The total receipts column represents the sum of receipts from investment earnings on and sales of the note and the fund.

Under the yield restriction requirements, the yield on investments cannot be materially higher than the yield on the bonds. The yield on an investment allocated to an issue is the discount rate that, when used in computing the present value as of the date the investment is first allocated to the issue of all unconditionally payable receipts from the investment, produces an amount equal to the present value of all unconditionally payable payments for the investment. When the net receipts and payments in Table 6 are present valued to January 31, 1994, that discount rate (which is the yield on investment) is 7.451%, exceeds the materially higher yield limit of 7.125%.

Table 6

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Payments (-)</th>
<th>Total Receipts (+)</th>
<th>Net Payments and Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>01/31/94</td>
<td>(49,277,766)</td>
<td>0</td>
<td>(49,277,766)</td>
</tr>
<tr>
<td>02/01/94</td>
<td>0</td>
<td>3,000,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>05/01/94</td>
<td>0</td>
<td>5,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>07/01/94</td>
<td>(1,544,437)</td>
<td>1,544,437</td>
<td>0</td>
</tr>
<tr>
<td>01/01/95</td>
<td>0</td>
<td>5,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>07/01/95</td>
<td>(1,476,730)</td>
<td>1,476,730</td>
<td>0</td>
</tr>
<tr>
<td>09/01/95</td>
<td>0</td>
<td>20,000,000</td>
<td>20,000,000</td>
</tr>
<tr>
<td>01/01/96</td>
<td>(788,579)</td>
<td>788,579</td>
<td>0</td>
</tr>
<tr>
<td>03/01/96</td>
<td>0</td>
<td>22,000,000</td>
<td>22,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(53,087,512)</td>
</tr>
</tbody>
</table>

Table 7 illustrates a method of calculating the excess arbitrage earnings equaling the amount
of a yield reduction payment necessary to reduce the yield on investment to the maximum permitted yield of 7.125%, which is not materially higher than the bond yield. The yield reduction payment is calculated using the sum of the future values of each payment and each receipt as of the relevant computation date (January 1, 1999) using the bond yield adjusted to the materially higher yield (7.125% per year) as the interest rate in the future value computation.

Table 7

<table>
<thead>
<tr>
<th>Date</th>
<th>Net Payments and Receipts</th>
<th>Future Value to Yield Restriction Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/94</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>01/31/94</td>
<td>(49,277,766)</td>
<td>(69,538,765)</td>
</tr>
<tr>
<td>02/01/94</td>
<td>3,000,000</td>
<td>4,232,654</td>
</tr>
<tr>
<td>05/01/94</td>
<td>5,000,000</td>
<td>6,932,027</td>
</tr>
<tr>
<td>07/01/94</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>01/01/95</td>
<td>5,000,000</td>
<td>6,615,919</td>
</tr>
<tr>
<td>07/01/95</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>09/01/95</td>
<td>20,000,000</td>
<td>25,256,907</td>
</tr>
<tr>
<td>01/01/96</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>03/01/96</td>
<td>22,000,000</td>
<td>26,826,890</td>
</tr>
</tbody>
</table>

Table 7 demonstrates that the yield on investments exceeds the bond yield increased to the materially higher limit by $325,632, which, unless reduced, would cause the bonds to be arbitrage bonds. In this example, the issuer can make a yield reduction payment because this is a variable yield bond. The yield reduction payment necessary to reduce the yield on investment to the allowable materially higher limit (that is, 7.125%) is $325,632. The issuer must submit a yield reduction payment within 60 days of the interim computation date by filing Form 8038-T together with the required payment, but need not submit a payment more than once every five years.

In this example, the issuer’s arbitrage liability to the U.S. Treasury, as of the January 1, 1999 computation date, would include a yield reduction payment of $325,632 and rebate of $126,800 ($452,432 minus $325,632), because the yield reduction payment is treated as a payment in the determination of rebate amount under Treas. Reg. Section 1.148-3(d)(1)(v). The issuer would report this arbitrage liability and submit payment using Form 8038-T. Because January 1, 1999 is an interim computation date, the issuer need only make a payment equal to at least 90% of the rebate amount as of that date to satisfy the rebate requirements. For the final computation date, an issuer must pay 100% of the rebate amount.
You can find information about the tax laws that apply to tax-exempt bonds and other municipal financing arrangements at IRS.gov/bonds, including:

- Published guidance about the tax laws that apply to municipal financing arrangements, including revenue rulings, revenue procedures, notices and announcements.
- Tax forms, instructions and publications related to tax-exempt bonds.
- Additional educational resources on Voluntary Compliance.

If you have account specific questions, call Customer Account Services toll-free at 877-829-5500.

**What to do if you discover a violation - The TEB Voluntary Closing Agreement Program**

The IRS is committed to resolving federal tax violations with the issuer. The TEB Voluntary Closing Agreement Program (TEB VCAP) provides remedies for issuers of tax-exempt bonds, tax credit bonds, and direct pay bonds that voluntarily come forward to resolve a violation that cannot be corrected under self-correction programs found in the Treas. Reg. or other published guidance. Notice 2008-31 provides information and general guidance about TEB VCAP. Internal Revenue Manual (IRM) Section 7.2.3 provides general procedures under which the IRS will enter into closing agreements. Closing agreement terms and amounts vary by the degree of the violation as well as the facts and circumstances.

TEB VCAP offers standardized methods for resolving certain types of noncompliance, referred to as resolution standards. For example, TEB VCAP offers a resolution standard for circumstances in which a failure of an escrow agent or trustee to perform obligations under an escrow agreement to purchase U.S. Treasury Securities – State and Local Government Series necessary to maintain compliance with yield restriction requirements results in a yield restriction violation. TEB VCAP is also available to resolve other violations of the yield restriction and rebate requirements.

An issuer must use Form 14429, Tax Exempt Bonds Voluntary Closing Agreement Program Request, to submit a request and provide the required information. While the IRS generally enters into closing agreements with the issuer of the bonds, in certain cases other parties to the bond transaction (including an entity borrowing the bond proceeds) may also participate in the negotiations and jointly execute the agreement.

For more information about this program, including request submission requirements, case processing procedures and resolutions standards, see IRM Section 7.2.3.