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ARBITRAGE AND REBATE

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This outline describes the arbitrage and rebate compliance rules set forth in Section 148 of the Internal Revenue Code of 1986, as amended, and related Treasury Regulations. The outline covers introductory matters such as the historical background of the rules, the process for determining whether funds are subject to the rules, basic yield restriction requirements and the procedure for determining the amount to be paid to the federal government. The outline also addresses more advanced topics, such as evaluating whether a transaction gives rise to replacement proceeds, determining how the yield restriction rules are applied, valuing investments, allocating proceeds to expenditures, anti-abuse provisions and the miscellaneous exceptions to the rebate requirement.

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#### Abstract

ARBITRAGE-OVERVIEW ${ }^{1}$ This outline provides a broad overview of the arbitrage and arbitrage rebate principles of Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"). ${ }^{2}$ Unless otherwise identified, Section references in this outline are to the Code or the applicable Treasury Regulations.


## PART I -ARBITRAGE

## I. ARBITRAGE—INTRODUCTION

The arbitrage restrictions of the Code, together with other Code restrictions, govern the investment and expenditure of "proceeds" of a tax-exempt bond issue. ${ }^{3}$ Generally, the arbitrage restrictions limit the amount of interest or other return that can be made (or retained) from the investment of proceeds of tax-exempt bonds.

Interest on a bond is not tax-exempt if it is an "arbitrage bond" under § 103(b)(2). An "arbitrage bond" is defined under § 148(a) as any bond issued as part of an issue any portion of the proceeds of which are reasonably expected (at the time of issuance of the bond) to be used directly or indirectly: (1) to acquire higher yielding investments; or (2) to replace funds which were used directly or indirectly to acquire higher yielding investments. Section 148(a) also provides that a bond will be treated as an arbitrage bond if an issuer intentionally uses any portion of the proceeds of an issue in a manner described in (1) or (2) of the preceding sentence.

## II. THE LAW

## A. The Code

Originally addressed solely in one subsection of Section 103 of the Internal Revenue Code of 1954, as amended (the " 1954 Code"), the statutory provisions relating to arbitrage (and related matters) are now contained in Sections 148, 149(d) (relating to advance refundings, as in effect prior to the Tax Cuts and Jobs Act), 149(g) (relating to hedge bonds) and 150 (relating to reimbursement expenditures).

[^0]
## B. Regulations

Prior to 1989 , the Treasury Regulations relating to the arbitrage provisions of Section 103(c) of the 1954 Code were contained in Sections 1.103-13, 1.103-14, and 1.103-15 (the "1979 Regulations"). Section 1.103-13 addressed the certification of reasonable expectations, the definition of "proceeds," the definition of "materially higher," the computation of yield, and "artifice and device." Section 1.103-14 addressed primarily temporary periods, working capital deficit financings, and refundings. Section 1.103-15 addressed certain issues in connection with advance refundings. In addition, Section 1.103-15AT addressed arbitrage matters related to the rebate provision that was enacted in 1985.

Commencing in 1989, the Internal Revenue Service (the "IRS") began issuing regulations under § 148. On June 18, 1993, the IRS published final arbitrage regulations (the "Regulations"). Included in the Regulations were provisions relating to compliance with the bond maturity limits, arbitrage rules, federal guarantees, limits on advance refundings, hedge bonds, a number of definitions, and reimbursement. The Regulations generally apply to all issues issued after June 30, 1993. ${ }^{4}$ In 2016, the IRS published two sets of final arbitrage regulations (the "2016 Final Regulations"), including (a) regulations published July $18^{5}$ related to working capital, yield, rebate and qualified hedges applicable to bonds issued, or qualified hedges entered into or modified, after October 16, 2016, and (b) regulations published December $9^{6}$ concerning the definition of issue price applicable to bonds sold on or after June 7, 2017.

## C. Other Guidance

The balance of the arbitrage restrictions is gleaned from case law, proposed regulations, revenue procedures, revenue rulings, notices, and private letter rulings, which are cited in the text where relevant.

## D. General Yield Restriction Rules and Certification Requirements

The determination of whether a bond is an arbitrage bond is based in part on the reasonable expectations of the issuer at the time of issuance of the bond, as well as any intentional acts after issuance. Section 1.148-2(b)(2) requires, with some limited exceptions, an officer of the issuer responsible for issuing the bonds to certify in good faith as to the issuer's expectations, including the facts and estimates that form the basis of such expectations. Notwithstanding good expectations at the time of issuance, intentional acts after issuance can result in the bonds being treated as arbitrage bonds. See Section 1.148-2(c); Rev. Rul. 80-91; Rev. Rul. 80-92. This rule is also codified in the second sentence of $\S 148(\mathrm{a})$, as follows: "[A] bond shall be treated as an arbitrage bond if the issuer intentionally uses any portion of the proceeds of the issue of which such bond is a part in a manner described in paragraph (1) or (2)" (i.e., to acquire higher yielding investments or to replace funds that are directly or indirectly so used). In addition to "intentional actions" causing a bond to become an arbitrage bond, notwithstanding reasonable expectations to

[^1]the contrary, a certification that is given in bad faith will not protect a bond from being an arbitrage bond. See Rev. Rul. 85-182.

## III. PROCEEDS

## A. Definitions

The first step in arbitrage compliance is generally to identify the "proceeds" of a tax-exempt bond issue, because it is the "proceeds" that may not be invested in higher yielding investments unless otherwise excused by a "temporary period" or special exception. Over time, the IRS has expanded the statutory concept of "proceeds" to include certain funds that, while not necessarily reflecting the generally understood meaning of the term proceeds, are treated as proceeds for arbitrage purposes. For example, Section 1.103-13(g) of the 1979 Regulations provided that amounts in a sinking fund were treated as proceeds of the bond issue, and Rev. Rul. 78-348 concluded that certain pledges of securities were also treated as proceeds of the bond issue. Under the Regulations, "gross proceeds" are defined as "proceeds and replacement proceeds of an issue" and "proceeds" are further defined as "sale proceeds, investment proceeds and transferred proceeds of an issue." Replacement proceeds include amounts reasonably expected to be used to pay debt service on a tax-exempt issue, amounts pledged to provide security on a tax-exempt bond issue and other amounts that have a sufficiently direct nexus to the bond issue.

A second step is to identify the "substantial beneficiaries" of a bond issue. As described below, only gross proceeds held by, derived from or for the benefit of a substantial beneficiary are subject to the arbitrage restrictions. A substantial beneficiary includes, but is not necessarily limited to, the actual issuer of the tax-exempt bonds as well as an entity that borrows the proceeds of a tax-exempt bond issue to carry out the purpose of that issue.

A third step is to identify investment property. The arbitrage restrictions apply to investment property of a substantial beneficiary that constitutes gross proceeds of a tax-exempt bond issue. As described below, investment property includes debt obligations, securities, annuity contracts, and "investment type property." Investment type property is property principally held for the passive production of income. Investment property excludes certain tax-exempt bonds and demand deposit SLGS.

## 1. Sale Proceeds and Investment Proceeds.

Sale proceeds are amounts received, actually or constructively, from the sale of the bonds, including amounts used to pay underwriter's discount and accrued interest (other than pre-issuance accrued interest ${ }^{7}$ ). Sale proceeds also include amounts derived from the sale of a right that is associated with a bond (e.g., a call right). Investment proceeds are any amounts actually or constructively received from the investment of proceeds. ${ }^{8}$

[^2]
## 2. Transferred Proceeds.

Transferred proceeds arise in connection with refundings, and are unspent proceeds of a refunded issue at the time the principal of that refunded issue is paid from the proceeds of the refunding issue. These unspent proceeds of the refunded issue are "transferred" (usually pro rata) to the refunding bonds and subjected to a number of complicated rules in Section 1.148-9(b). No proceeds transfer until an actual payment or "discharge" of principal of the prior issue using proceeds of the refunding issue. There is no transfer of proceeds merely upon the establishment of an escrow fund when money is set aside for the future redemption of or payment of principal on the refunded bonds, and no transfer occurs when proceeds of the refunding issue is used to pay only interest on the refunded issue. Further, if there are amounts held in funds or accounts for the refunded issue that are not "proceeds" of that refunded issue, such as equity contributed by the issuer to a reserve fund or debt service fund, those non-proceeds amounts do not become transferred proceeds of the refunding issue.

If only a portion of the outstanding principal of a refunded issue is refunded, only a portion of the unspent proceeds will transfer over to the refunding issue, based on the proportion of outstanding principal being refunded. Under $1.148-9(b)(1)$, there is a transfer on each date that principal of the refunded issue is discharged with proceeds of the refunding issue. Section 1.148-9(b)(1) goes on to provide that " $[t]$ he amount of proceeds of the prior issue that becomes transferred proceeds of the refunding issue is equal to the proceeds of the prior issue on the date of that discharge multiplied by a fraction: (1) the numerator of which is the principal amount of the prior issue discharged with proceeds of the refunding issue on the date of that discharge; and (2) the denominator of which is the total outstanding principal amount of the prior issue on the date immediately before the date of that discharge." ${ }^{10}$

Section 1.148-9(b) defines the principal of a bond as, with respect to a "plain par bond," ${ }^{11}$ its stated principal amount, and, with respect to all other bonds, its present value. Section 1.148-9(b) also contains numerous technical rules relating to the selection of the investments that transfer. ${ }^{12}$

## 3. Replacement Proceeds.

## a. General.

"Proceeds" of an issue include only sale proceeds, investment proceeds, and transferred proceeds. The arbitrage and rebate requirements, however, apply to "gross proceeds" of an issue, which include not only proceeds but also any "replacement proceeds." Amounts are classified as "replacement proceeds" if the amounts have a "sufficiently direct nexus" to the issue or to the governmental purpose of the issue to conclude that the amounts would have been used for that

[^3]governmental purpose if the proceeds of the issue were not used for that governmental purpose. For these purposes, a governmental purpose includes the expected use of amounts for the payment of debt service on a particular date. The mere availability or preliminary earmarking of amounts for such purpose does not, however, in itself establish a sufficient nexus to create replacement proceeds.

Under Section 1.148-1(c), "replacement proceeds" include amounts in a sinking fund, a pledged fund, and "other replacement proceeds" to the extent that the funds are held by or derived from a substantial beneficiary of the issue. A substantial beneficiary typically includes the issuer, any related party to the issuer or the state in which the issuer is located, and any conduit borrower of proceeds. A substantial beneficiary does not include any entity solely because the entity is a guarantor of the issue. Thus, collateral provided by a letter of credit bank (but not a borrower) to secure the bank's obligations under a letter of credit is generally not treated as replacement proceeds. In addition, if an organization solicits donations to fund construction of a particular facility, but then uses tax-exempt bond proceeds to pay for that facility, the funds raised may constitute replacement proceeds under the "nexus" theory, especially if such funds can only be used for that facility. See Section 1.148-1(c)(1).

## b. Sinking Funds.

Under Section 1.148-1(c)(2), a sinking fund "includes a debt service fund, redemption fund, reserve fund, replacement fund, or any similar fund, to the extent reasonably expected to be used directly or indirectly to pay principal or interest on the issue." ${ }^{13}$

It is possible to have an indirect sinking fund, such as where a bond issue is structured with a bullet maturity (i.e., a term bond with no requirement that portions of the bond be retired in installments before the final maturity date) and in the years leading up to the maturity, the issuer accumulates amounts to pay the future operation and maintenance expenses in the year in which the bullet maturity comes due, thereby freeing all revenues earned in the final year for payment of debt service on the bonds. The amounts saved to pay operation and maintenance expenses are an "indirect" sinking fund and therefore "replacement proceeds" even though they will be used to pay operation and maintenance expense rather than debt service. ${ }^{14}$ Similarly, where a fund was created simultaneously with the issuance of bonds (from a source other than sale proceeds), the interest on which was expected to be used "indirectly" to pay debt service (interest income on the fund was deposited into the issuer's general fund, and amounts in the general fund were used, among other things, for payment of debt service on the bonds), the IRS held that the fund was an indirect sinking fund for the bonds and amounts in the fund were "replacement proceeds." ${ }^{15}$

It is often difficult to tell whether a particular fund is a "sinking fund." The portion of an income fund or revenue fund into which all revenues of an enterprise of a city are deposited and out of which all expenses of the enterprise are paid (including transfers to a bond fund to pay debt

[^4]service), and that is reasonably expected to pay debt service, is a "sinking fund." See Rev. Rul. 78-349. If an issuer maintains an investment fund funded with its tax revenues and also has outstanding general obligation bonds, the investment fund is generally not treated as a sinking fund unless the issuer reasonably expects to use such moneys to pay debt service on the bonds. See Rev. Rul. 78-302. If the size of the debt service payments due on the bonds are such that the issuer would be unable to make those payments if investment income from the investment fund was not available, the investment income generally would be considered part of a sinking fund.

Pursuant to §54A(d)(4)(C), as it existed prior to the Tax Cuts and Jobs Act, a sinking fund established for qualified tax credit bonds is effectively disregarded for arbitrage rebate and yield restriction purposes if the fund satisfies certain requirements. This provision allows qualified tax credit bonds to remain outstanding to maturity to increase the availability of tax credits while providing for the security of a repayment fund.

## c. Pledged Funds.

A "pledged fund" is any amount that is directly or indirectly pledged to pay principal or interest on the issue in such a manner that provides reasonable assurance that the amount will be available for that purpose if the issuer encounters financial difficulties, even if it is not reasonably expected that such amounts will be used to pay debt service on the bonds. ${ }^{16}$ Under Section 1.148-1(c)(3)(i), a pledge to a guarantor of an issue is an indirect pledge to secure payment of principal or interest on the bonds (e.g., amounts pledged to a bank pursuant to a letter of credit reimbursement agreement relating to a letter of credit that secures payment of the bonds). A pledged fund can arise even where it is not the issuer who pledges the fund to the payment of bonds. For example, if a state pledges one of its funds to a local government's debt, this fund will be a pledged fund. See Rev. Rul. 78-348. This result is in part dependent on the IRS's perception that the state is an indirect beneficiary of a borrowing by one of its local governments. However, a pledge made by a party other than a substantial beneficiary of the financing does not give rise to "replacement proceeds."

In many instances it may be difficult to ascertain whether a fund constitutes a pledged fund. For example, a letter of credit bank may hold funds of a conduit borrower to be used for operation and maintenance, capital replacement and debt service. If, pursuant to the terms of the bank documents, the bank has complete discretion over withdrawals, the fund might be considered a pledged fund. Section 1.148-1(c)(3)(ii) provides an exception such that an amount held under an agreement to maintain the amount at a particular level of funds for the direct or indirect benefit of bondholders will not be treated as a pledged fund if (1) the issuer may grant rights in the amount that are superior to the rights of the bondholders or the guarantor; or (2)(a) the amount does not exceed reasonable needs for which it is maintained, (b) the level is tested no more frequently than every six months and (c) the amount may be spent without substantial restriction other than replenishment by the next testing date. An arrangement like this is often referred to as a "negative pledge. ${ }^{17}$

[^5]Three private letter rulings provide insight into the IRS's analysis of replacement proceeds. In PLR 9243051, the IRS held under the arbitrage regulations effective on May 18, 1992 (and prior to amendment by TD 8476, 06/14/93) (the "1992 Regulations") that accumulated fees charged underground storage tank owners in connection with a state's arrangement of the clean-up costs for underground storage tanks would be replacement proceeds of long-term bonds issued to pay the costs of claims for property damaged by leaking storage tanks. In PLR 9509035, the IRS found that long-term bonds issued in connection with the refinancing of a city's pension arrangements with a state would produce replacement proceeds in the state's funds and accounts under the Regulations. Although the Tax Court held for the IRS in a declaratory judgment pursuant to $\S 7478$, the D.C. Circuit Court of Appeals vacated and remanded that decision. In PLR 9534014, the IRS revisited underground storage tank bond financing structures and found under the Regulations that replacement proceeds would not arise if no significant balances of fees charged were accumulated during the life of long-term bonds issued to pay the costs of claims for property damaged by leaking storage tanks. See also PLR 9243051 and PLR 9233041 with regard to the 1992 Regulations.

In January of 2009, the Montana Facility Finance Authority issued a material-event notice stating that a series of bonds issued in 2002 for the Mission Ridge retirement community was under IRS audit, and that the IRS had issued a "Notice of Proposed Issue" in October 2008, concluding that the bonds were arbitrage bonds. The agent had determined that certain funds and accounts held by the borrower, including entrance fees contributed by residents, constituted replacement proceeds that should have been yield restricted, but were not. Almost three years later, in May of 2011, the IRS released a Technical Advice Memorandum ${ }^{18}$ which concluded that the entrance fees were not, in fact, replacement proceeds of the bonds. Although there appeared to be a nexus between (1) the entrance fees and other facility revenues and (2) the bonds, the bond owners had no reasonable assurance that those entrance fees would be available to pay principal or interest on the bonds if Mission Ridge encountered financial difficulties.

## d. Other Replacement Proceeds.

"Other replacement proceeds" or "ORPs" arise to the extent that an issue is outstanding longer than necessary, and the issuer expects there to be "available amounts," defined as described in Part I, Section V.C., below. The Regulations provide a safe harbor which clarifies that an issue does not give rise to ORPs if (1) it is a working capital issue that is outstanding no longer than 13 months, (2) the bonds (including a refunding bond) meet the bond maturity limit in § 147(b) relating to the economic life of assets financed, (3) in the context of a refunding, the weighted average maturity of the refunding bonds is not longer than the weighted average maturity of the refunded bonds (and the refunded issue satisfied one of the above two tests) ${ }^{19}$ or (4) it is a working capital issue that meets the safe harbor for longer-term working capital financings which generally requires the issuer to determine the actual available amounts as of the first day of each fiscal year beginning with the year it expects to have such available amounts (with an outside limit that the first testing year must not be later than five years after the issue date) and apply such available amounts within 90 days of the beginning of the fiscal year to redeem bonds of the issue (or another

[^6]issue) or to invest in eligible tax-exempt bonds. Prior to the 2016 Final Regulations, ORPs also would arise if a working capital reserve was directly or indirectly financed with the issue unless all the net proceeds of the issue were spent within six months or the bonds were exempt from rebate under § $148(\mathrm{f})(4)(\mathrm{D})$ (the small issuer exception), but the 2016 Final Regulations eliminated that restriction.

## e. Disposition Proceeds.

In some situations, proceeds are created as a result of an event that was not reasonably expected at the time the bonds were issued. Under Section 1.141-12 and Rev. Proc. 2018-26, one requirement for taking remedial action in the event of a change in use of bond financed property (e.g., a change that causes the private business or private loan tests to be met) is for the issuer to treat any "disposition proceeds" as "gross proceeds" for purposes of § $148 .{ }^{20}$ These "disposition proceeds" are any amounts derived from the sale, exchange, or other disposition of property financed with proceeds of the issue. Remedial actions under Section 1.141-12 and Rev. Proc. 2018-26 may require disposition proceeds to be used to redeem or defease debt or to finance a new qualifying project. In the latter situation, the issuer may treat the date of receipt of the disposition proceeds as the issue date of the bonds for purposes of temporary periods (see Part I, Section IV.B.8.) and rebate exceptions (see Part II, Section VIII.). Further, the receipt of disposition proceeds will not disqualify the use of an expenditure exception (see Part II, Section VIII.) for rebate. See Section 1.141-12 and Rev. Proc. 2018-26.

## f. Exceptions from the Definition of Replacement Proceeds.

The corpus and investments of certain perpetual trust funds of states and the investments of certain permanent university funds have been exempted from the definition of replacement proceeds. The fund must be described in Section 648 of the Deficit Reduction Act of 1984, Pub. L. 98-369. In PLR 20048022, the IRS recognized another class of state permanent funds as being exempt from the definition of replacement proceeds. However, under IRS Notice 2022-39, the IRS indicated that forthcoming proposed regulations are expected to be issued which will amend Section 1.148-11(d)(1)(i)(F) regarding whether certain perpetual trust funds created and controlled by states will be treated as replacement proceeds for purposes of the arbitrage investment restrictions on tax-exempt bonds under § 148.

## B. Reserve Funds

Amounts held in a "reasonably required reserve or replacement fund" (or "4R Fund"), whether funded from proceeds or from other funds, qualify for certain exceptions from investment limits. Under $\S 148(\mathrm{~d})(2)$ and Section 1.148-2(f)(1), no more than $10 \%$ of the stated principal

[^7]amount of a bond issue ${ }^{21}$ of proceeds ${ }^{22}$ may be deposited into a reserve or replacement fund, whether or not such fund is reasonably required without the bonds being "arbitrage bonds." Note that if that $10 \%$ limit is exceeded, the bonds will be arbitrage bonds even if the money in the reserve fund is invested at yields below the bond yield. ${ }^{23}$ Amounts other than proceeds may be placed in a 4R Fund without regard to the $10 \%$ limit, but the investment of those amounts may be subject to yield restriction as discussed in the next paragraph. ${ }^{24}$

Regardless of how a 4R Fund is funded, § 148(d)(2) and Section 1.148-2(f)(2) imposes a limit on the amount that can be invested without regard to yield. This limit is equal to the least of: (1) the maximum annual principal and interest requirements on the issue; (2) $10 \%$ of the stated principal amount (or, for bonds with more than a de minimis amount of premium or discount, the issue price) of the issue; and (3) $125 \%$ of the average annual principal and interest requirements on the issue. ${ }^{25}$ Amounts in excess of this limit may not be invested above the bond yield. ${ }^{26}$

## IV. INVESTMENT OF PROCEEDS

## A. General

The arbitrage rules are intended to prevent the perceived abuse whereby issuers and conduit borrowers of tax-exempt bonds, typically political subdivisions or 501(c)(3) organizations and hence not subject to income tax, borrow at tax-exempt rates, invest the bond proceeds at higher taxable rates, and use the arbitrage profit for discretionary purposes.

As previously described, the first step in the arbitrage analysis is to identify gross proceeds subject to arbitrage limits. The second step is to identify investments allocated to gross proceeds. Investments can include both "purpose investments" (i.e., those acquired to further the governmental purposes of the issue, such as a conduit loan for a multifamily transaction) and "nonpurpose investments" (i.e., investments that are not purpose investments, such as investments held in a project fund or debt service reserve fund). See definitions in Section 1.148-1(b).

Investments subject to arbitrage restrictions are referred to in § 148(b) as "investment property" and include any security, any obligation, any annuity contract, any investment-type property or, in the case of a bond other than a private activity bond, certain residential rental

[^8]property for family units not located within the jurisdiction of the issuer. ${ }^{27}$ Investment-type property is defined in Section 1.148-1(e) as property that is held principally as a passive vehicle for the production of income, including production of income based on the time value of money. For instance, investment-type property can include a prepayment for property or services if a principal purpose of the prepayment is to receive an investment return. Section 1.148-1(e)(2) provides that certain qualifying prepayments will not be treated as investment-type property, including (1) customary prepayments (including prepayments for common types of equipment or software maintenance or extended warranty contracts), (2) prepayments within 90 days of date of delivery of property or services, and (3) certain narrowly defined prepayment contracts for natural gas and electricity. ${ }^{28}$ Final regulations published April 9, $2019^{29}$ added Section 1.148-1(e)(4), which provides that investment-type property does not include real property or tangible personal property (for example, land, buildings, and equipment) that is used in furtherance of the public purposes for which the tax-exempt bonds are issued. For example, investment-type property does not include a courthouse financed with governmental bonds or an eligible exempt facility under $\S 142$, such as a public road, financed with private activity bonds. ${ }^{30}$ Investments also include the investment elements of a hedge, if a payment by the issuer corresponds to a conditional or unconditional obligation by the hedge provider to make a payment on a later date (e.g., a one-time upfront payment to purchase an interest rate cap). ${ }^{31}$ Investment property excludes non-AMT taxexempt bonds (and AMT Tax-exempt bonds for proceeds of AMT Tax-exempt bonds). ${ }^{32}$ Investment property also excludes One Day Demand Deposit Series Certificates of Indebtedness of the State and Local Government Series ("Demand Deposit SLGS") ${ }^{33}$ and an interest in a regulated investment company to the extent that at least 95 percent of the income to the holder of the interest is interest that is excludable from gross income under section 103(a), subject to the same limit on AMT/non-AMT as described in the preceding sentence, as they are also defined as tax-exempt bonds for purposes of Section $148 .{ }^{34}$

## B. Yield Restriction

## 1. General Rules.

Yield restriction and rebate are different concepts under the arbitrage restrictions, although both may require repayment of investment earnings to the IRS. In general, unless eligible for a temporary period or other exception, gross proceeds cannot be invested at a yield "materially higher" than the yield on the bonds. However, (1) there are several temporary periods that may allow "gross proceeds" to be invested at higher yields, and (2) in some situations where a temporary period is not available, the issuer may be able to make "yield reduction payments" to

[^9]the IRS to reduce the yield on the investments (as described further below). The rebate rules apply in those situations where a temporary period allowed the issuer to invest at a higher yield and govern whether the issuer must repay those excess earnings to the IRS.
"Yield" is discussed below. To permit appropriate comparison, the same methods and compounding intervals must be used in calculating the yield on the investments and the bonds. ${ }^{35}$

## 2. Bond Yield.

The yield on an issue is calculated under Section 1.148-4 both for the purpose of determining whether a bond is an "arbitrage bond" under § 148(a) and for computing rebate liability under $\S 148(\mathrm{f})$. The yield on a fixed yield bond issue is generally computed once, on the issue date, but it must be recomputed upon the transfer by the issuer of certain rights associated with the bonds (e.g., a call right) and upon termination of a qualified hedge. Yield on variable yield bond issues is calculated separately for each computation period (e.g., every year or every five years), based on the actual (not expected) bond payments and payments for qualified guarantees and hedge payments. A variable yield issue is any issue that contains at least one variable yield bond. ${ }^{36}$ The computation of bond yield, including the treatment of credit enhancement and interest rate swaps, is discussed in detail in Part II, Section VII below.

## 3. Issue of Bonds.

Yield is calculated separately on each "issue" of bonds. Section 1.150-1(c) defines an "issue" for purposes of §§ 103 and 141 through 150 , such that two or more bonds are part of the same "issue" if they are sold at substantially the same time (less than 15 days apart), sold pursuant to the same plan of financing, and are reasonably expected to be paid out of substantially the same source of funds. ${ }^{37}$ Each type of tax-advantaged bond that has a different structure for delivery of a tax benefit that reduces the issuer's borrowing costs or different program eligibility requirements is treated as part of a different issue. ${ }^{38}$ For example, tax-exempt bonds and tax credit bonds would be treated as separate issues, as they have different structures for delivery of a tax benefit. Taxable and tax-exempt bonds (or other tax advantaged bonds) are not part of the same issue but may constitute an abusive arbitrage device (see Part I, Section VI) or a device to avoid other limits in $\S \S 141$ through $150 .{ }^{39}$ Section $1.150-1(c)(4)$ addresses the single issue analysis for commercial paper and draw-down loans. ${ }^{40}$ In addition, although separate bonds or series of bonds may be treated as a single issue, there are provisions that allow a single issue to be treated as separate issues for certain purposes-for example Section 1.150-1(c)(3) includes a special rule permitting an issue financing separate governmental purposes to be treated as separate issues for certain purposes (e.g., facility qualification, Code Section 147 purposes), and Sections 1.141-13(d) and
1.148-9(h) permit elections to allocate portions of an issue to separate purposes-but that separate issue treatment generally does not apply for purposes of determining yield on the entire issue. ${ }^{41}$

## 4. Materially Higher.

"Materially higher" is not defined in § 148, but under Section 1.148-2(d)(2). Materially higher is generally $1 / 8$ of 1 percentage point $(0.125 \%)$. Special "materially higher" definitions apply for refunding escrows and replacement proceeds ( $1 / 1000$ of $1 \%$, or $0.001 \%$ ), program investments ( $1.500 \%$ ), ${ }^{42}$ qualified mortgage bonds ( $1.125 \%$ ) and student loan bonds ( $2.000 \%$ ). ${ }^{43}$ If some non-purpose yield restricted investments are subject to the $0.001 \%$ limit, then all yield restricted non-purpose investments are subject to that restriction.

## 5. Yield on Investments.

Generally, the yield on investments is computed on the same basis as yield on bonds and is determined separately for each separate class of investments. Yields on investments in separate classes may not be blended for arbitrage purposes, although they may for rebate purposes. Separate classes of investments include each category of yield restricted purpose investments and program investments subject to a different yield limit, yield restricted nonpurpose investments, and all other nonpurpose investments. Section 1.148-5(b)(2). An issuer may waive temporary periods and other exceptions to yield restriction under Section 1.148-3(h). Note that yield reduction payments may be available (see below) to reduce yield. All investments in a refunding escrow must be treated as one investment. ${ }^{44}$

## 6. Yield Over the Term of Issue.

It is the yield on investments "over the term of the issue" that is relevant under § 148(b)(1). Under this rule, it is permissible to have proceeds invested in higher yielding investments for a period of time so long as later (or earlier) investments in lower yielding investments offset the higher yielding investments and result in an overall investment yield over the term of the issue that is not materially higher than the bond yield. ${ }^{45}$ An issuer that intends to blend after a rebate computation date (other than with respect to proceeds in a refunding escrow and a sinking fund expected on the issue date to reduce the escrow yield) may be required to actually make a rebate payment despite the intended future blending. The Regulations effectively allow yield blending to be broken up into 5 -year computation periods for variable rate bonds. If investments within the same class have different "materially higher" standards, the lowest prevails.

[^10]
## 7. Yield Reduction Payments.

Although an issuer may not be allowed to invest gross proceeds above the bond yield, in certain cases, Section $1.148-5$ (c) allows an issuer to make a "yield reduction payment" to the United States to reduce the yield on yield-restricted investments to the appropriate rate. Not all "gross proceeds" are eligible for yield reduction payments. The major categories of investments or issues that are eligible for such yield reduction payments are (1) investments entitled to an initial temporary period (such as most new money construction funds), (2) investments allocable to most variable yield issues, (3) investments in a 4R Fund not meeting the size limit in Section 1.148-2(f)(2)(ii), but only to the extent that the amounts are less than or equal to $15 \%$ of the principal of the issue or are not (except for investment earnings) expected to pay debt service on the issue, and (4) certain transferred and replacement proceeds in the context of a refunding. The major categories of investments generally not eligible to use yield reduction payments are replacement proceeds and proceeds of an advance refunding issue (although the ability to issue tax-exempt advance refundings of other tax-exempt bonds was repealed effective Janurary 1, 2018). The yield reduction payment rules are particularly useful in three areas that historically have required yield restriction: (1) unexpended proceeds in a construction fund after the temporary period expires (see Part I, Section IV.B.8.a. below); (2) variable yield issues with yield restricted pledged funds; and (3) "transferred proceeds" held in a prior escrow as a result of a current refunding. See also Part II.

## 8. Temporary Periods.

## a. New Money Issues.

Generally, sale and investment proceeds of a new money issue will qualify for a three-year "temporary period" (i.e., a three-year period during which the proceeds may be invested at a yield materially higher than the bond yield) if the issuer reasonably expects to satisfy (1) the expenditure test, (2) the time test, and (3) the due diligence test. ${ }^{46}$ Under the expenditure test, the issuer must expect to spend at least $85 \%$ of the net sale proceeds (i.e., sale proceeds minus any amounts deposited into a 4R Fund and any amount invested as part of a minor portion) by the end of the three-year temporary period. Under the time test, the issuer must expect to incur, within six months of the issue date, a substantial binding obligation to a third party to expend at least $5 \%$ of the net sale proceeds on capital projects. Under the due diligence test, the issuer must expect the completion of the capital projects and the allocation of the net sale proceeds to expenditures to proceed with due diligence. This three-year temporary period is not available for working capital financings. A five-year temporary period is allowed for construction issues if a certification of a licensed architect or engineer is obtained prior to issuance stating that a period of longer than three years is necessary. ${ }^{47}$

[^11]
## b. Refunding Issues.

## (i) General.

Section 1.150-1(d) defines "refunding issue" as an issue the proceeds of which are used to pay principal, interest, or redemption price on another issue, including issuance costs, accrued interest, a 4R Fund, or similar costs properly allocable to the refunding issue. An issue is not a refunding issue if the obligor ${ }^{48}$ of the would-be refunding issue is not the obligor of the other issue (or a party related to the obligor of the other issue). Thus, if County X financed a water and sewage facility with tax-exempt bonds in 1994 and in 1998 sells it to unrelated County Y, which finances such purchase with a tax-exempt bond issue, that transaction will be treated as an acquisition of the facility and not as a refunding, even though County X used the proceeds from the sale to discharge its tax-exempt bond issue.

## (ii) Current vs. Advance Refundings; Temporary Periods.

A current refunding issue is an issue that is issued not more than 90 days before the last payment of principal or interest on the prior issue paid with proceeds of the refunding issue. All other refunding issues are advance refunding issues. ${ }^{49}$ Generally, the temporary period for an advance refunding issue is 30 days, and the temporary period for a current refunding is 90 days. ${ }^{50}$ The temporary period for transferred proceeds of a current refunding is the temporary period for those proceeds if such proceeds had remained proceeds of the prior issue; however, the temporary period for transferred proceeds of an advance refunding terminates on the issue date of the advance refunding issue. ${ }^{51}$ The Tax Cuts and Jobs Act repealed the ability to issue tax-exempt bonds after 2017 to advance refund other tax-exempt bonds, but the temporary period rules still apply to advance refunding bonds issued prior to the effective date of such repeal.

## c. Other Financings.

The temporary period for a working capital financing, whether a restricted working capital financing or an extraordinary working capital financing, is 13 months. ${ }^{52}$ Section 148(c)(2) limits the temporary period for pool bond proceeds (other than single family mortgage bonds) to six months (or two years for "construction issues," see Part II, below) in the hands of the issuer prior to being loaned to borrowers; the balance of the otherwise available temporary period for proceeds by the borrower is reduced by the amount of time the proceeds were held by the issuer. ${ }^{53}$

[^12]
## C. Rebate

Rebate, introduced first in the Mortgage Subsidy Bond Tax Act of $1980^{54}$ for single family mortgage bonds and extended to virtually all tax-exempt bonds by the 1986 Act, has a similar economic effect for issuers as does yield restriction: investment return over the yield on the issue, if earned, is paid over, or rebated, to the U.S. Treasury. Failure to rebate arbitrage profits may result in taxability of the bonds (or loss of related tax credits or subsidies). ${ }^{55}$ Further, compliance with the rebate requirement does not obviate the need for compliance with the yield restriction rules (through making yield reduction payments where available) and, to that extent, the two rules are duplicative. Thus, the rebate requirement primarily impacts proceeds that are entitled to a temporary period, such that the issuer was allowed to invest the proceeds at a higher yield than the yield on the bonds. For a comprehensive description of rebate and exceptions to rebate, see Part II, below.

## D. Fair Market Value Rules

To address the concern that issuers would purchase investments with proceeds at artificially high prices (thus artificially lowering yields and reducing rebate or avoiding yield restriction), the IRS has issued rules relating to the fair market value of investments purchased with bond proceeds, contained in Section 1.148-5.

## 1. Market Price Rules.

The yield on an investment of bond proceeds must generally be based on a purchase price for the investment that does not exceed its "fair market value." Section 1.148-5(d) also contains some very specific valuation rules. Under Section 1.148-6(c), gross proceeds cannot be allocated to a nonpurpose investment in an amount greater than its fair market value (with any adjustments described below for qualified administrative costs). In other words, if an issuer accepts a below-market yield on a nonpurpose investment (by paying an above-market price), the investment will be deemed to have a yield based on the fair market price, and rebate will be due based on the excess of the market yield over the bond yield.

## 2. Administrative Costs.

When an issuer computes yield on an investment, costs or expenses paid directly or indirectly to purchase, carry, sell, or retire the investment (administrative costs) are generally not taken into account. ${ }^{56}$ In other words, administrative costs generally do not increase the purchase price of the investment or reduce the receipts from the investment. However, certain "qualified administrative costs" may be taken into account in determining the yield of the investment. "Qualified administrative costs" are reasonable, direct administrative costs (other than carrying costs), such as separately stated brokerage or selling commissions, but not (a) legal, accounting,

[^13]recordkeeping, custody, or similar costs, (b) general overhead or similar internal, indirect costs, like employee salaries and office expenses, or (c) rebate computation costs. Special rules also apply to purpose investments (such as qualified mortgage loans and qualified student loans) and to shares in a regulated investment company or a "commingled fund." See the discussion of the safe harbor for qualified administrative costs in Part I, Section IV.D. 4 below.

## 3. Safe-harbor for Guaranteed Investment Contracts and Investments for Defeasance Escrows.

Section 1.148-5(d) sets forth criteria to establish a safe harbor that guaranteed investment contracts ("GICs") and United States Treasury obligations for yield restricted defeasance escrow, not purchased directly from the Treasury ${ }^{57}$ or pursuant to regular way trading and traded on an established securities market under § 1273, are purchased at fair market value. The safe harbor rules are summarized below:

## a. Bona Fide Solicitation.

The issuer must make a bona fide solicitation for the purchase of the investment. A bona fide solicitation is a solicitation that satisfies all of the following requirements: (i) the bid specifications are in writing and are timely forwarded to potential providers; (ii) the bid specifications include all material terms of the bid; (iii) the bid specifications include a statement notifying potential providers that submission of a bid is a representation that the potential provider did not consult with any other potential provider about its bid, that the bid was determined without regard to any other formal or informal agreement that the potential provider has with the issuer or any other person, and that the bid is not being submitted solely as a courtesy to the issuer or any other person for purposes of satisfying the three-bid requirements described below; (iv) the terms of the bid specifications are commercially reasonable; (v) for purchases of GICs only, the terms of the solicitation take into account the issuer's reasonably expected deposit and drawdown schedule for the amounts to be invested; (vi) all potential providers have an equal opportunity to bid (for example, no potential provider is given the opportunity to review other bids that is not equally given to all potential providers (i.e., no exclusive "last look") before providing a bid); and (vii) at least three reasonably competitive providers are solicited for bids; a reasonably competitive provider is a provider that has an established industry reputation as a competitive provider of the type of investments being purchased.

## b. Bid Requirements.

The issuer must receive at least three bids from providers that the issuer solicited under a bona fide solicitation meeting the requirements of paragraph a. above and that do not have a material financial interest in the issue ${ }^{58}$ at least one of the three bids described above must be from

[^14]a reasonably competitive provider; and if the issuer uses an agent to conduct the bidding process, the agent cannot bid to provide the investment.

## c. Bid Selection Requirements.

For a GIC, the winning bid is the highest yielding bona fide bid (determined net of any broker's fees). For a portfolio of securities for a defeasance escrow, the following requirements must be met: (1) the winning bid is the lowest cost bona fide bid, including any broker's fees; ${ }^{59}$ (2) the lowest cost bona fide bid (including any broker's fee) is not greater than the cost of the most efficient portfolio of securities containing exclusively of SLGS; ${ }^{60}$ and (3) if sales of SLGS are suspended on that day, the cost comparison to SLGS is not required.

## d. Other requirements.

The provider of the investments or the obligor on the GIC must certify to the administrative costs that it pays (or expects to pay, if any) to third parties in connection with supplying the investment. In addition, the Regulations require that the issuer retain key records relating to the bid with the bond documents until three years after the last outstanding bond is redeemed. These would include, for example: a copy of the GIC itself or security confirmations; a record of the amount actually paid by the issuer for the investments, including administrative costs; the names of the persons and entities submitting the bids; the time and date of the bids and the bid results; and the bid solicitation form. Also, if the terms of the investment deviated from the bid solicitation form, or if a submitted bid is modified, a brief statement explaining the deviation should be retained.

## 4. Qualified Administrative Costs.

For GICs and yield restricted defeasance escrow investments, direct administrative costs will be treated as "qualified" only if they are "reasonable" within the meaning of those regulations. If treated as qualified administrative costs, brokers' commissions and similar fees paid by the provider of the GIC or the securities are not treated as additional yield to the issuer. A safe harbor is provided under Section 1.148-5(e) which includes two components: a "per-investment safe harbor;" and a "per-issue safe harbor."

## a. Per-investment Safe Harbor.

A broker's commission or similar fee with respect to the acquisition of a GIC or investments purchased for a yield restricted defeasance escrow is reasonable and not treated as additional yield to the issuer to the extent that the amount of the fee the issuer treats as a qualified administrative cost does not exceed the lesser of: (A) $\$ 46,000$; or (B) $0.2 \%$ of the computational base, or if more, $\$ 5,000$ (the "per-investment safe harbor" for calendar year 2023). See "Cost-of-living Adjustment" below. The computational base for a GIC is the amount of gross

[^15]proceeds the issuer reasonably expects, as of the date the contract is acquired, to be deposited over the term of the GIC. For investments in a yield restricted defeasance escrow, the computational base is the amount of gross proceeds initially invested in the escrow.
b. Per-issue Safe Harbor.

For any bond issue, the issuer cannot treat as qualified administrative costs more than $\$ 130,000$ (for calendar year 2023) in brokers' commissions or similar fees with respect to all GICs and investments for yield restricted defeasance escrows purchased with gross proceeds of the issue (the "per-issue safe harbor"). See "Cost-of-living Adjustment" below.

## c. Exceeding the Safe-Harbor.

This regulation does not restrict the ability of the issuer to pay a fee that exceeds the safe harbor amount. The portion of the fee that is within the safe harbor constitutes a qualified administrative cost, and any amounts in excess of the safe harbor are qualified administrative costs if they are "reasonable." The Regulations do not specify factors for determining the reasonableness of fees in excess of the safe harbor. Instead, the determination of whether a fee is reasonable is based on all the facts and circumstances, including whether the fee is comparable to administrative costs that would be charged for the same investment or a reasonably comparable investment if acquired with a source of funds other than gross proceeds of tax-exempt bonds.

## d. Cost-of-living Adjustment.

Section 1.148-5(e) provides for a cost-of-living adjustment for both the per-investment safe harbor and the per-issue safe harbor. The adjusted safe harbor dollar amounts are published by the IRS in an annual revenue procedure that sets forth inflation-adjusted items. The cost-of-living adjustment for calendar year 2023 allows $\$ 46,000$ in qualified administrative costs per GIC and $\$ 130,000$ per issue, with a floor of $\$ 5,000 .{ }^{61}$

## E. Investment of Commingled Funds

## 1. Investment Rules.

Special rules apply with respect to the investment of commingled funds. Fund earnings, gains and losses must be allocated among investors ${ }^{62}$ on the basis of a "consistently applied, reasonable ratable allocation method." As described above, a "consistently applied" accounting method is a method that accounts (a) uniformly for amounts that are commingled with proceeds and (b) consistently for proceeds of the bonds for each fiscal year (or portion) during which the bonds are outstanding. See Section 1.148-6(e)(2).

[^16]
## 2. Special Rules for Common Reserve Funds or Sinking Funds.

Certain special rules apply to commingled funds that serve as common reserve funds or sinking funds. Under Section 1.148-6(e)(6), investments in such a fund must be allocated (after adjustment under the universal cap ${ }^{63}$ ) among the various issues the fund serves at least every three years and on each date that a new issue covered by the commingled fund is issued (or the date an issue is retired in certain cases the case of (iii) below) in accordance with one of three specified allocation methodologies: (i) the outstanding relative values of the issues as of the date of allocation; ${ }^{64}$ (ii) the relative amount of the issues' remaining maximum annual debt service requirements; or (iii) the aggregate relative original principal amounts.

## F. Minor Portion

Under § 148(e), an amount of up to the lesser of 5\% of the sale proceeds or \$100,000 may be invested in materially higher yielding investments; however, these amounts remain subject to the rebate requirement.

## G. Limitation on Funding a Reserve

Section $148(\mathrm{~d})(2)$ causes a bond to be an arbitrage bond if more than $10 \%$ of the proceeds of the issue of which it is a part are used to fund a reserve. It does not matter whether the reserve is otherwise reasonably required or not. While this clearly applies to funding a debt service reserve fund, the IRS has applied this provision to the funding of an account that is not reasonably expected to be spent in a reasonable time. ${ }^{65}$

## H. Prohibition on Financing Out of Jurisdiction Housing Projects

In perhaps an oddly placed bond restriction included in §148(b)(2)(E), if proceeds of a nonprivate activity bond are used to finance a housing project located outside the jurisdiction of the issuer, such housing project is subjected to the arbitrage rules as though it were an investment. This provision basically prohibits such financings. Although it is under $\S 148$ of the Code and is couched as an arbitrage rule, it is really a separate restriction.

## V. EXPENDITURE OF PROCEEDS

The "expenditure" of proceeds typically removes such proceeds from the realm of arbitrage. The rules for when proceeds are "spent" are generally simple, but special rules exist for determining an expenditure for working capital purposes, reimbursement purposes, and from a commingled fund.

[^17]
## A. Capital Expenditures

Proceeds may be treated as spent when applied to a "current outlay of cash for a governmental purpose" ${ }^{66}$ and for a "capital expenditure," defined as "any cost of a type that is properly chargeable to capital account (or would be so chargeable with a proper election or with the application of the definition of 'placed-in-service' under Section 1.150-2(c) under general federal income tax principles). ${ }^{107}$

## B. Reimbursement

The expenditure rules are more complex in the context of reimbursement bonds. With limited exceptions, proceeds are not treated as allocated to an expenditure paid prior to the issuance of the bonds unless, (1) not later than 60 days after the expenditure the issuer (or, in the alternative, in a qualified $501(\mathrm{c})(3)$ bond financing, the conduit borrower) adopted or expressed an official intent (meeting the requirements of Section 1.150-2(e)(1)), ${ }^{68}$ (2) the expenditure is a capital expenditure, a cost of issuance of a bond, an extraordinary working capital item ${ }^{69}$ or a grant, ${ }^{70}$ and (3) the reimbursement allocation is made not later than 18 months after the later of (a) the date of the expenditure or (b) the date the project was placed in service or abandoned, but not more than three years after the date of expenditure. ${ }^{71}$ These requirements do not apply to certain de minimis amounts or to certain "preliminary expenditures". Furthermore, an issuer must not use the reimbursed amount such that the amount becomes replacement proceeds (other than a bona fide debt service fund) and must not employ an abusive device or attempt to avoid the rules of §§ 142 through 147. Reimbursement rules for restricted working capital expenditures are addressed in Section 1.148-6(d)(5); generally, in order for reimbursement bonds to be allocated to restricted working capital expenditures, there must be no other available amounts on the date such expenditure is made (as further described in C. below) and no other available amounts as of the date of the reimbursement.

## C. Working Capital Purposes

## 1. General.

Section 1.148-6(d)(3) provides guidance on the expenditure of proceeds for working capital purposes. As a general rule, "proceeds of an issue may only be allocated to working capital expenditures as of any date to the extent that those working capital expenditures exceed 'available

[^18]amounts' as of that date." This rule also applies to replacement proceeds but is subject to some exceptions as described below.

Section 1.148-6(d)(3)(ii) excepts from the rule stated in the previous paragraph expenditures for the following specified purposes: (i) issuance costs and "qualified administrative costs;" (ii) "qualified guarantee" fees or payments for a "qualified hedge;" (iii) certain amounts paid to the United States, such as rebate payments; (iv) payment of debt service on an issue from (a) unexpected excess sale and investment proceeds, and (b) certain debt service reserve fund earnings; (v) working capital expenditures that "do not exceed $5 \%$ of the sale proceeds of an issue and . . . are directly related to capital expenditures financed by the issue;" (vi) extraordinary items (e.g., casualty losses or an extraordinary legal judgments in excess of reasonable insurance coverage), provided that any available amounts in a reserve for that purpose have been expended; and (vii) interest on the issue for at least three years from the issue date.

For a discussion of the six-month spending exception for working capital financings, see Section VIII.B. herein.

## 2. Available Amounts.

"Available amount" is defined as "any amount that is available to an issuer for working capital expenditure purposes of the type financed by an issue." ${ }^{72}$ Generally, the available amount excludes proceeds of any issue but includes cash, investments and other amounts that may be used without "legislative or judicial action and without a legislative, judicial, or contractual requirement that those amounts be reimbursed." "Available amounts" may be held by the issuer or a related party. A reasonable working capital reserve is treated as unavailable. Any working capital reserve is reasonable if it does not exceed 5 percent of the actual working capital expenditures in the previous fiscal year. ${ }^{73}$

## 3. Long Term Working Capital Financing.

Working capital financings are frequently done as short-term tax or revenue anticipation notes ("TRANs"). It is possible to issue long term working capital financings, subject to the restrictions against other replacement proceeds, which generally require that there be no available amounts during the period the bonds remain outstanding, or, if such available amounts do arise, that there is a proper unburdening action taken. See Sections 1.148-6(d)(3) and 1.148-1(c)(4). The 2016 Final Regulations added a safe harbor against the creation of replacement proceeds for longer-term working capital financings for issuers experiencing financial distress, contained in Section 1.148-1(c)(4)(ii), which requires the issuer to determine the actual available amounts (net of a reasonable working capital reserve) as of the first day of each fiscal year beginning with the year it expects to have such available amounts (and in no event no later than 5 years after the issue date) and to apply such available amounts to redeem or to invest in "eligible tax-exempt bonds." ${ }^{74}$

[^19]
## D. Grants

Under Section 1.148-6(d)(4), proceeds may be treated as expended when applied to the making of a grant. ${ }^{75}$ The 2016 Final Regulations added Section 1.150-1(f), which did not change the favorable rule that bond proceeds are deemed spent on the date of the grant, but provides that the "character and nature" of the grantee's use of bond proceeds are taken into account in determining which rules apply to such bond proceeds. Accordingly, Section 1.150-1(f) clarifies that there is a look-through treatment for purposes of determining whether proceeds are used for capital or working capital expenditures, the temporary period to the issuer prior to making the grant and the useful life of the financed assets.

## E. Allocation Methodology

An issuer may generally use any reasonable, "consistently applied" accounting method to determine when proceeds are expended, provided that proceeds must be accounted for in the same manner for purposes of both $\S \S 141$ and 148. An issuer is not required to use the same accounting method for different issues of bonds, even if the issues finance the same project. ${ }^{76}$ If an issuer fails to maintain books and records sufficient to establish the accounting method for an issue, the specific tracing method is used. Further, Section 1.148-6(d)(1)(iii) provides that an issuer must account for the expenditure of proceeds not later than 18 months after the later of the date the expenditure is paid or the date the project financed is placed in service, provided that, in any event, this allocation must be made by the date 60 days after the fifth anniversary of the issue date or the date 60 days after the retirement of the issue, if earlier. ${ }^{77}$

In many instances, issuers (and other governmental entities) enter into agreements regarding the usage of moneys, including intergovernmental loans and intergovernmental agreements for the construction of joint projects. In addition, borrowers in many conduit financings may enter into development or other agreements with parties having common ownership or board control, and expect expenditures related to such agreements be financed with proceeds of tax-exempt bonds. Under what circumstances are transfers between these parties treated as expenditures? Under Section 1.148-6(d)(7), any payment of proceeds to a related party is not an expenditure of those proceeds. ${ }^{78}$ A "related party" with respect to governmental units

Presumably the requirement for the beginning of the testing is whether there are available amounts on the first day of the fiscal year. Even so, that may very well be the first fiscal year beginning after the issuance.

75 The grantor may not impose any obligation or condition on the grantee to repay the grant if such repayment is anticipated to occur as a result of the obligation or condition, but conditions designed to ensure expenditure of the moneys for the desired governmental purposes are acceptable. If the grant is repaid, the moneys are treated as unspent proceeds unless expended within 60 days of receipt. Section 1.148-6(d)(4).

76 However, an expenditure must not be double counted.
77 See TAM 9723012 (March 21, 1997), in which the Service refused to permit the reallocation of proceeds to expenditures several years after the initial allocation. However, the Service concluded in PLR 200248002 (November 29, 2002) that Section 1.148-6(d)(1)(iii) permits issuers both to allocate and then to reallocate proceeds to expenditures as long as the reallocations are made within the time frame permitted by the regulation.

78 A payment of bond proceeds by an issuer of the bonds to another department of the issuer is not an expenditure. For example, a city might issue bonds for a construction project and then need to obtain a city building permit as part of that project. The City may not allocate the cost of the building permit as an expenditure of proceeds of that issue. Moreover, a payment of bond proceeds by a conduit borrower to a related party to that borrower is also not an expenditure. For example, a payment by the borrower to a developer entity which is a related party to the
and 501(c)(3) organizations, are members of the same "controlled group" under Section 1.150-1(e) and, with respect to other persons, a "related party" is a "related person" as defined in § 144(a)(3). In certain instances, it may be possible to trace the expenditures of proceeds to "out-of-pocket" expenditures of the related party (i.e., payments made to a third party which is not a related party).

## F. Certain Investment Proceeds

For governmental bonds and private activity bonds financing governmentally owned assets, investment proceeds (other than investment proceeds held in a refunding escrow) that are commingled with substantial tax and other revenues from governmental operations of the issuer may be treated as spent when commingled as long as the issuer reasonably expects the amounts to be expended for governmental purposes within six months of the date of commingling, using any reasonable accounting assumption. ${ }^{79}$

## VI. ANTI-ABUSE RULES

## A. Abusive Arbitrage Device

Under Section 1.148-10, if an "abusive arbitrage device" is employed in connection with the issuance of governmental obligations, the obligations will be considered to be arbitrage bonds. An abusive arbitrage device is a transaction or series of transactions that attempt to circumvent the provisions of $\S 148$ by (i) enabling the issuer to exploit the difference between tax-exempt and taxable interest rates to obtain material financing advantage, and (ii) overburdening the tax-exempt bond market. The 2016 Final Regulations revised Section 1.148-10 to add an issuer's bona fide need to finance "extraordinary" working capital items to the list of factors that could outweigh factors tending to show overburdening of the market.

## B. Abusive Advance Refunding Transactions

Section $149(\mathrm{~d})(4)$ as it existed prior to the Tax Cuts and Jobs Act prohibited use of a "device" in an advance refunding "to obtain a material financial advantage (based on arbitrage) apart from savings attributable to lower interest rates." Certain transactions are described as "devices" in the legislative history of such § 149(d)(4) and in the General Explanation of the Tax Reform Act of 1986, at p. 1215. In addition to giving the Commissioner fairly broad discretion to re-characterize perceived abusive transactions to reflect their economic substance, Section 1.148-10(d) also sets out five additional examples of transactions that are considered abusive. Finally, in Rev. Rul. 94-42, the IRS indicated that another type of transaction (one involving certain types of bond insurance arrangements under which the bond insurer was expected to pay the debt service on the bonds) would cause the interest on bonds to be taxable; interestingly, the IRS did not use the abusive device provisions of Section 1.148-10 to stop such transactions.

## C. Clearly Reflect the Transaction

Under Section 1.148-10(e), the Commissioner "may exercise the Commissioner's discretion to depart from the rules of Sections 1.148-1 through 1.148-11 as necessary to clearly
borrower.
79 See Section 1.148-6(d)(6).
reflect the economic substance of the transaction" if an issuer enters into a transaction for a principal purpose of obtaining a material financial advantage based on the difference between tax-exempt and taxable interest rates. For an example of this situation, see City of Columbus, Ohio v. Commissioner, ${ }^{80}$ which involved a state pension fund created to replace local plans, in exchange for agreements by the local entities to repay the state over a 65 -year period with interest at $4.25 \%$. The state had proposed that municipalities could "prepay" their "obligation" at a $35 \%$ discount, and the City of Columbus proposed issuing tax-exempt bonds for this purpose. The Tax Court concluded that-
irrespective of the technicalities of the arbitrage regulations . . . , respondent was entitled to make the adjustment of the yield calculation to take the 35-percent discount into account and to reject petitioner's [the IRS] application for ruling under Section 1.148-10(e), on the ground that the economic substance of the transaction clearly revealed a materially higher yield . . . . Consequently, the interest on the proposed bonds will not be exempt under § 103(a). (Emphasis added).

The Tax Court did not treat the investments held by the pension fund as the "acquired obligation." Rather, the Tax Court determined that the "arbitrage" was the difference between the yield on the proposed bonds of $6 \%$ and the offered discount on the obligation to the state with a resulting "yield" of $7.57484 \%$. After appeal and remand, the Tax Court determined that since there was no prepayment for property, the prepayment, in and of itself, did not constitute investment-type property. City of Columbus v. Commissioner, T.C. Memo. 1998-135 (1998). For an application of the "economic substance" doctrine to an advance refunding transaction, see PLR 200424003 (a technical advice memorandum), which required two bond issues to be treated as a single issue based upon the economic substance of the transactions.

## PART II —REBATE AND EXCEPTIONS TO REBATE

## VII. ARBITRAGE REBATE

## A. Rebate Generally

## 1. The Code.

Under § 103(b)(2), the exclusion of interest pursuant to § 103(a) is not applicable to any arbitrage bond. Under $\S 148(\mathrm{f})(1)$, a bond that is part of an issue will be treated as an arbitrage bond unless the rebate requirements set forth in $\S \S 148(f)(2)$ and (3) are satisfied for that issue. $\S \S 148(f)(2)$ and (3) require timely payment of an amount to the United States (the "rebate amount'). The rebate amount to be paid is the sum of (i) the excess of the amount earned on all nonpurpose investments over the amount that would have been earned on those investments had those investments been invested at a rate equal to the yield on the issue, plus (ii) any income attributable to that excess.

Section 148(f)(3) specifies that rebate payments be made in accordance with an installment payment schedule over the life of the issue. A payment must be made at least once every five

[^20]years in an amount such that at least $90 \%$ of the excess earnings amount at the time payment of the installment is required will be paid on such date, and a final payment of the balance must be made within 60 days of the final retirement of the issue.

## 2. Summary of Rebate Methodology under the Regulations.

The history of the arbitrage regulations is discussed in versions of this outline from Bond Attorneys' Workshops in prior years.

## a. Computation and Payment Dates.

(i) Rebate Amount. The rebate amount for an issue as of any computation date is the excess of: (a) the future value of all receipts on nonpurpose investments during the period ending on the computation date; over (b) the future value of all payments on nonpurpose investments during that same period. Future value is computed as of the computation date. ${ }^{81}$ Future value is computed using the bond yield.
(ii) Rebate Payment Dates. Rebate computation payment dates must be selected by the issuer so that the first computation date is no more than five years after the issue date and each subsequent computation payment date is no more than five years after the previous computation payment date. The date that the bonds are paid in full is also a computation payment date (the "final computation date"). Each computation payment date must also be a computation date. No later than 60 days after each computation payment date (other than the final computation date), rebate must be paid in an amount that, when added to the future value as of the computation date of previous rebate payments made for the issue, equals at least $90 \%$ of the rebate amount as of that computation date. No later than 60 days after the final computation date, rebate must be paid in an amount that, when added to the future value of previous rebate payments made for the issue, equals $100 \%$ of the rebate amount as of that computation date. ${ }^{82}$ For issues retired within three years of the issue date, the final payment need not occur before the end of eight months after the issue date or the end of the period in which the issuer reasonably expects that any spending exceptions will apply to the issue. ${ }^{83}$
(iii) Late Payments; Interest Due. Under Sections 1.148-3(g) and (h), a rebate payment is considered made only when paid at the place or places designated by the IRS and accompanied by the form provided by the IRS for payment purposes (Form 8038-T). For late payments, payment of a penalty and interest will normally be required, but the penalty is automatically waived if the rebate amount is paid (with interest) within 180 days after the discovery of the failure to pay, unless (A) the Commissioner determines the failure was due to "willful neglect," or (B) the issue is under examination by the IRS during the period beginning on the date the failure first occurs and ending on the date 90 days after the receipt of the rebate amount. Waiver outside these circumstances will only occur in unusual circumstances. ${ }^{84}$ If not waived, the

[^21]penalty will be $50 \%$ of the amount due for governmental or qualified 501(c)(3) bonds or $100 \%$ of the amount due for all other qualified private activity bonds. For late payments and underpayments, interest accrues at the underpayment rate defined by § 6621 beginning on the date the correct rebate amount was due and ending on the date 10 days before actual payment is made. ${ }^{85}$
(iv) Computation Dates. Under Section 1.148-3(e), a computation date means each date on which the rebate amount for an issue must be computed, which includes the first required computation date, subsequent required computation dates and the final computation date.
(1) For a fixed yield issue, the first required computation date is any date selected by the issuer that is not later than the fifth anniversary date of the issue. The subsequent required computation dates are any dates selected by the issuer that are not later than five years after a previous computation date for which a rebate installment was made. The final computation date is the date that an issue is retired (unless as may be extended as described in VII.A.2.a(ii) above). ${ }^{86}$
(2) For a variable yield issue, the first required computation date is the last day of any bond year selected by the issuer ending on or before the fifth anniversary date of the issue date. After the first required payment date, the issuer may not change previous computation dates and must consistently treat either the end of each bond year or the end of each subsequent fifth bond year as a subsequent required computation date. The selection of computation dates may be critical for these issues. The final computation date is the date an issue is retired (unless as may be extended as described in Section VII.A.2.a(ii) above). ${ }^{87}$ After the first date payment is made the issuer may not change its choice of the first required payment date or its choice of subsequent required payment dates. ${ }^{88}$
(3) "Bond year" for these purposes is each one-year period selected by the issuer (with short first and last bond years permitted). If no day is selected by the issuer for these purposes before the earlier of the final maturity date of the issue or the date that is five years after the issue date, each bond year ends on the anniversary date of the issue date and on the final maturity date. ${ }^{89}$

## b. Investment Receipts.

(i) Relationship to Rebate. The rebate amount as of any computation date is the excess of the future value of all receipts on nonpurpose investments ("nonpurpose receipts") over the future value of all payments on such nonpurpose investments ("nonpurpose

[^22]payments"). Significantly, there is no rebate obligation with respect to purpose investments (for example, in a conduit issue, the loan of proceeds by the issuer to the borrower). ${ }^{90}$
(ii) Types of Receipts. There are three classes of nonpurpose receipts: actual/constructive receipts; disposition receipts; and computation date receipts. ${ }^{91}$
(a) Actual/Constructive Receipts. Receipts include any amount that is actually or constructively received from a nonpurpose investment, including interest earnings, return of principal, and gain from the sale or retirement of the investment, with no adjustments for costs or expenses paid to purchase, carry, sell, or retire the investment (unless those costs are qualified administrative costs). ${ }^{92}$ See the discussion of qualified administrative costs in Part I, Section IV.D.2. above.
(b) Disposition Receipts. Under Section 1.148-3(d)(2)(ii), a disposition receipt arises when a nonpurpose investment ceases to be allocated to an issue or ceases to be subject to the rebate requirements of an issue, other than by reason of a sale or redemption of the nonpurpose investment. This will occur, for example, when an investment becomes allocable to transferred proceeds of another issue, ceases to be allocable to the issue as a result of the operation of the universal cap rules of Section 1.148-6(b)(2), or is initially subject to a rebate requirement and subsequently qualifies for an exception to rebate (e.g., an investment allocated to a fund initially subject to the rebate requirement but that subsequently qualifies as a bona fide debt service fund). ${ }^{93}$ An investment that is de-allocated from an issue is generally treated as if sold for its fair market value on the date of de-allocation.
(c) Computation Date Receipts. Nonpurpose receipts also include computation date receipts. ${ }^{94}$ Computation date receipts arise on the computation date in an amount equal to the value of all nonpurpose investments allocated to the issue at the end of the computation period.
(d) Commingled Fund Receipts. The rules of Section 1.148-6(e) control when receipts are allocated among the various investors of a commingled fund (as defined above). Section 1.148-3(d)(3) provides that the commingled fund rules control the required determinations of receipts and not the rules for actual/constructive receipts, disposition receipts, and computation date receipts stated above.
(e) Value of Nonpurpose Investments. The value of a nonpurpose investment on a date is generally determined by the consistent application (on that date) of one of the following three valuation methods: (1) outstanding stated principal amount plus accrued interest for "plain par investments;" (2) present value for fixed rate investments; and (3) fair market value for any investment.

[^23]A plain par investment (1) is issued with no more than a de minimis amount of original issue discount or premium, ${ }^{95}$ or acquired after issuance at no more than a de minimis amount of market discount or premium, (2) is issued for a price that does not include interest other than pre-issuance accrued interest, (3) bears interest that is unconditionally payable at least annually from the issue date at a single, stated, fixed rate, or is a variable rate instrument, ${ }^{96}$ and (4) has a lowest stated redemption price that is not less than its outstanding stated principal amount. The present value of an investment on any date is defined, generally, as the present value as of that date of all future unconditionally payable receipts to be received from and payments to be paid for the investment, using the yield on the investment as the discount rate. ${ }^{97}$ The determination of fair market value is governed by Section 1.148-5(d)(6). See Part I, Section IV.D above.

When valuing investments, certain restrictions apply. First, all yield restricted investments must be valued at present value. ${ }^{98}$ Second, for an investment that is not yield restricted, it must generally be valued at fair market value on the date it is first allocated to an issue, or first ceases to be allocated to an issue, as a result of a deemed acquisition or disposition, except as described in the following sentence. ${ }^{99}$ The fair-market-value rule does not apply if that disposition is the result of the transferred proceeds rules (Section 1.148-9(b)) or the universal cap rules (Section 1.148-6(b)(2)) or the investment is in a commingled fund. ${ }^{100}$ These rules are complex; if you have to make these determinations, read the regulations carefully.

## c. Investment Payments.

(i) Relationship to Rebate. Recall that the rebate amount as of any computation date is the excess of the future value of all nonpurpose receipts over the future value of all nonpurpose payments. Five different types of payments must be considered, as discussed below: actual/constructive payments; allocated payments; computation period payments; computation date credits; and yield reduction payments.

## (ii) Types of Payments.

(a) Actual/Constructive Payments. Payments include the amounts of gross proceeds of an issue actually or constructively paid to acquire a nonpurpose investment or treated as paid to a commingled fund. ${ }^{101}$ These amounts may not generally be increased by any brokerage commissions or administrative expenses, and the price paid may not exceed the fair market value as of the purchase date (Section 1.148-6(c)). ${ }^{102}$

[^24](b) Allocation Payments. Payments include the value of nonpurpose investments on the date that a previously acquired nonpurpose investment first becomes allocable to an issue or becomes subject to the rebate requirements of an issue. Section 1.148-3(d)(1)(ii). For example, this type of allocation will arise (1) upon the pledge of a reserve or other fund of existing investments as security for an issue and (2) when proceeds of a refunded issue transfer to the refunding issue.
(c) Computation Period Payments. Payments include the value of an investment at the beginning of a computation period if the investment was allocated to an issue at the end of the preceding computation period. Section 1.148-3(d)(1)(iii). This rule provides symmetry for the determination of receipts and payments on an obligation that is held at the end of a computation period. The value of an investment for computation date receipt purposes should equal the value of an investment for computation period payment purposes.
(d) Computation Date Credits. Section 1.148-3(d)(1)(iv) provided a computation date credit of $\$ 1,000$ on (1) the last day of each bond year during which there are amounts allocated to gross proceeds of an issue that are subject to rebate requirements and (2) the final maturity date of an issue. The 2016 Final Regulations increased the credit to $\$ 1,400$ and adjusts it for inflation. The computation credit is $\$ 1,960$ for bond years ending in 2023. ${ }^{103}$
(e) Yield Reduction Payments. Finally, any amounts paid to the United States to reduce the yield on a nonpurpose investment, including rebate amounts, are treated as nonpurpose payments, Sections $1.148-3(\mathrm{~d})(1)(\mathrm{v})$ and $-5(\mathrm{c})$, and recoveries of overpayment of rebate pursuant to Section 1.148-3(i) are treated as negative yield reduction payments. ${ }^{104}$ See the discussion at Part I, Section IV.B. 7 above concerning yield reduction payments.

## d. The Future Value Method.

The future value of a payment or receipt at the end of any period is determined using the economic accrual method and equals the value of that payment or receipt when paid, received or treated as paid or received, plus interest assumed to be earned and compounded on such value over the period at a rate equal to the yield on the issue. ${ }^{105}$

## B. Computation of Yield on Fixed Yield Issues

1. Introduction.

The basic rule is that the yield on fixed yield issues, unlike variable yield issues, will not change over the life of the issue, with two exceptions as described in Section VII.B. 3 below.

[^25]
## 2. Definitions.

## a. Fixed Yield Issue.

A fixed yield issue is any issue comprised exclusively of fixed yield bonds. A fixed yield bond is any bond whose yield is fixed and determinable on its issue date. ${ }^{106}$

## b. Issue Price.

(i) In General. Under § 148(h), the yield on a fixed yield issue is determined on the basis of issue price (itself determined under §§ 1273 and 1274 as modified by Section 1.148-1(f) as discussed below). Issue price of an issue is generally the sum of the issue prices of all bonds in the issue. Under Section 1.148-1(f), the issue price of bonds issued for money is the first price at which a substantial amount ( $10 \%$ ) of the bonds with the same credit and payment terms is sold to the public. "Public" means any person other than an underwriter or a related party ${ }^{107}$ to an underwriter. "Underwriter" includes any person that agrees pursuant to a written contract with the issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the bonds to the public, and any person that agrees directly with such a person, pursuant to written contract, to participate in the initial sale of the bonds to the public. Issue price is not reduced by any issuance costs. The issue prices of bonds that do not have the same credit and payment terms are determined separately. ${ }^{108}$ All bonds of an issue that have the same credit and payment terms (often referred to as bonds of a single maturity) have the same issue price.
(ii) Private Placement Rule. If a bond is issued for money in a private placement to a single buyer that is not an underwriter or a related party to an underwriter, the issue price of the bond is the price paid by that buyer. The price paid by the buyer typically includes the par amount of the bonds but may be reduced by any fees treated by the buyer as original issue discount.
(iii) Special Rule for Competitive Sales. For bonds issued for money in a "competitive sale," an issuer may treat the reasonably expected initial offering price to the public as of the sale date as the issue price of the bonds. The term "competitive sale" is defined as a sale of bonds by an issuer to an underwriter that is the winning bidder in a bidding process that meets the following requirements: (A) notice of the sale is disseminated to potential underwriters in a manner designed to reach potential underwriters (e.g., posting notice of sale in The Bond Buyer or on an internet based website or other electronic medium that is regularly used for such purpose and is widely available to potential underwriters); (B) all bidders have an equal opportunity to bid (i.e., no last look); (C) the issuer receives bids from at least three underwriters with established industry reputations for underwriting new issuances of bonds; and (D) the bid is awarded to the bidder who submits the firm offer to purchase the bonds at the highest price (lowest interest cost).

[^26](iv) Hold the Issue Price Rule. This rule provides that an issuer may, as of the sale date, treat the initial public offering price of the bonds as the issue price of the bonds, provided that the following two conditions are met: (A) the underwriter(s) offered the bonds to the public at the specified initial offering price on or before the sale date, with the (lead) underwriter certifying to such fact and providing supporting evidence of such offering price (e.g., pricing wire or equivalent); and (B) each affected underwriter separately agrees, in writing, not to offer or sell the bonds to any person (including another underwriter) at prices higher than the initial public offering prices between the sale date and the earlier of the close of the fifth business day after the sale date or the date on which the underwriters have sold at least ten percent of the bonds to the public at a price not higher than the initial public offering price; with the latter ten percent alternative applying on a maturity by maturity basis. ${ }^{109}$
(v) Choice of rule for determining issue price. If more than one rule for determining the issue price of the bonds is available, at any time on or before the issue date, the issuer may select the rule it will use to determine the issue price of the bonds. On or before the issue date of the bonds, the issuer must identify the rule selected in its books and records maintained for the bonds. The issuer may choose to apply different rules to different bonds within the issue.
(vi) Bonds issued for property. The issue price of bonds issued for property other than money is determined under §§ 1273 and 1274. These include tax-exempt bonds (or leases) issued to acquire personal property such as vehicles or equipment. Also included are refunding bonds exchanged for refunded bonds of the issuer. In most cases, if such a bond has adequate stated interest (the rate is at least the adjusted applicable federal rate), the issue price will be par. If, however, the bond or the property for which the bond is issued is traded on an active market, the issue price will be determined based on fair market value.

## 3. Computation of Yield (Fixed Yield).

## a. Basic Method.

Yield on a fixed yield issue is defined as the discount rate that, when used in computing the present value as of the issue date of all unconditionally payable payments over the life of the issue of principal of and interest and (in certain instances) stated redemption prices on the issue, qualified guarantee fees (both paid and reasonably expected to be paid), and payments made or received under a qualified hedge, produces an amount equal to the present value of the aggregate issue price of the bonds of the issue as of the issue date. ${ }^{110}$ Yield is computed based upon the compounding of interest at the end of each compounding interval (a method referred to variously as the economic accrual method, constant interest method or actuarial method). Compounding intervals cannot exceed more than one year, yield is calculated to at least four decimal places, and reasonable standard financial conventions (e.g., 30/360-day counts) may be used but must be consistently applied. Sections 1.148-1(b) and -4(a).

[^27]
## b. Redemption Provisions.

(i) Mandatory and Expected Redemptions. If any bond is subject to mandatory early redemption or expected contingent redemption, it is treated as redeemed on its reasonably expected early redemption date at its value on that date. Section 1.148-4(b)(2)(i).
(ii) Deep Discount: Mandatory Sinking Fund Redemption of Term Bonds. In most cases, if the issue includes term bonds with mandatory sinking fund redemptions, bond yield is computed by treating those bonds as redeemed on their scheduled dates at a price of par plus accrued interest. But if those bonds are issued at a "deep" discount (discussed below), bond yield is computed by using the value of those bonds on the redemption date (not their stated principal amount), plus accrued interest. ${ }^{111}$ This special rule applies to a term bond if the "stated redemption price of the bond at maturity" (usually the face amount), exceeds the issue price of the bond by more than the product of (A) $0.25 \%$ per year times (B) the number of years to the weighted average maturity of the expected mandatory sinking fund schedule. Section 1.148-4(b)(2)(ii).
(iii) Yield-to-Call: Certain Bonds Subject to Optional Early Redemption. This rule affects callable premium bonds, short-call bonds, and stepped coupon bonds. For certain fixed yield bonds subject to optional early redemption, the yield on the issue is computed assuming the bonds are redeemed at their stated redemption prices on the optional redemption dates that would produce the lowest yield on each of the bonds subject to optional redemption. ${ }^{112}$ Stated redemption price for this purpose means the total redemption price of the bonds including any call premium. The three classes of fixed yield bonds subject to this yield-to-call requirement are: (A) bonds subject to optional redemption within five years of the issue date, but only if the yield on the issue computed by assuming those bonds are redeemed at maturity is more than $1 / 8$ percentage point higher than the yield on the issue computed by assuming those bonds are redeemed at their earliest redemption date; (B) premium bonds when the premium is more than the product of (x) $.25 \%$, ( y ) the stated redemption price of the bonds at maturity and ( z ) the number of complete years to the first optional redemption date for the bonds; and (C) stepped coupon bonds when the bonds bear interest at increasing interest rates. ${ }^{113}$

Prior to the adoption of the 2016 Final Regulations, the calculation of bond yield on an issue with bonds subject to optional early redemption was complex, because it was often necessary to run multiple scenarios with different redemption dates for different bonds to determine which combination produces the lowest yield on the issue. The 2016 Final Regulations changed the Regulations to require that the issuer assume each callable bond would be redeemed on the optional redemption date that would produce the lowest yield on that bond. ${ }^{114}$
(iv) Change in Bond Yield. Yield on a fixed yield issue is computed under the Regulations as of the issue date (based on reasonable expectations) and is not affected

[^28]by subsequent unexpected events, with two exceptions. First, yield must be recomputed for rebate purposes as of any date there is a transfer, waiver, modification or similar transaction of any right that is part of the terms of a bonds or otherwise associated with a bond in a transaction separate and apart from the original sale of a bond (such as sale or waiver of a redemption option). Second, if an issuer issued variable yield bonds and then entered into a qualified hedge that caused the issue to be treated as a fixed yield issue under Section 1.148-4(h)(4) (a "super-integrated hedge"), then it subsequently terminates that hedge within five years of the issue date of the bonds, the bond issue is treated as retired and reissued as a variable yield issue on the termination date. ${ }^{115}$ See also Section VII.E. below (qualified hedges). The deemed new issue is apparently a new issue for purposes of triggering the final computation date provisions of § 148(f) for the "retired" issue. ${ }^{116}$

## C. Computation of Yield on Variable Yield Issues

## 1. Introduction.

A variable yield issue is any issue that is not a fixed yield issue. ${ }^{117}$ If interest on any or all of the bonds of an issue is determined by reference to market interest rates, the issue is a variable yield issue. Thus, all of the bonds of a variable yield issue may be variable yield bonds, but in many cases a variable yield issue will include some fixed yield bonds. Yield on a variable yield issue is computed separately for each computation period as of the first date of each computation period. See the discussion of rebate computation dates in Section VII.A. 2 above.

## 2. Computation of Bond Yield (Variable Yield).

## a. General Rule.

The yield on a variable yield issue for a computation period is computed as of the first day of the computation period and is the discount rate that, when used in computing the present value of all the payments of principal and interest, fees for qualified guarantees, and payments on a qualified hedge that are attributable to the computation period, produces an amount equal to the present value (using the same discount rate) of the aggregate issue price of all the bonds of the issue for the computation period. ${ }^{118}$ For yield computation purposes, the bonds are treated as if retired and reissued at the end of each computation period.

## b. Issue Payments.

These payments include: (a) principal (including for bonds redeemed during the computation period an amount equal to the greater of the bond value or actual redemption price including any call premium) and interest paid during the computation period; (b) amounts paid or deemed to be paid during the computation period for a qualified guarantee; (c) amounts paid or deemed to be paid during the computation period for a qualified hedge; and (d) for bonds

[^29]outstanding at the end of a computation period, an amount equal to the bonds' value on the last day of the computation period. ${ }^{119}$ See Section VII.C.2.d. below.

Up-front and other "non-level" payments for a qualified guarantee for variable yield bonds must be allocated to each computation period. The Regulations provide a safe harbor for an allocation of non-level payments if an equal amount is treated as paid as of the first day of each bond year over the term of the qualified guarantee. This amount is sometimes referred to as the "constant payment amount." ${ }^{120}$

## c. Issue Price.

The issue price for both variable yield bonds and fixed yield bonds in a variable yield issue as of the issue date is based on the general issue price definition discussed at Part II, Section VII.B. 2 above. Any bond (including a fixed yield bond) outstanding at the end of a computation period is treated as if it were immediately reissued at the end of the computation period for a deemed issue price equal to the value of the bond used as the issue payment immediately prior to such reissuance.

## d. Determination of the Value of a Bond.

Section 1.148-4(e) sets forth two methods for valuing outstanding bonds:
(i) Plain Par Bonds. Plain par bonds are valued at their outstanding stated principal amount plus accrued unpaid interest. The value of a plain par bond that is actually redeemed or treated as redeemed is its stated redemption price on the redemption date, plus accrued, unpaid interest. A "plain par bond," as defined in Section 1.148-1(b), is a bond (a) with not more than a de minimis ${ }^{121}$ amount of original issue discount or premium, (b) issued for a price that does not include accrued interest other than pre-issuance accrued interest, (c) that bears a single, stated fixed rate or that is a variable rate debt instrument (under § 1275), (d) that pays interest at least annually, and (e) that has a lowest stated redemption price not less than the outstanding stated principal amount. ${ }^{122}$
(ii) Other Bonds. Fixed yield bonds that are not plain par bonds are valued at their present value on a given date calculated using the yield on the bond as the discount rate (or for term bonds subject to mandatory tender, the yield on the term bond to maturity) and their expected remaining payments including fees to be paid for a qualified guarantee in connection with the issue. ${ }^{123}$ Variable yield bonds that are not plain par bonds are valued at their present value on a given date calculated using the yield giving effect to the initial interest rate on the bonds and their expected remaining payments under such initial interest rate including fees for a qualified guarantee in connection with the issue. ${ }^{124}$

[^30]
## e. Special Rules.

As of the first day on which a variable yield issue would qualify as a fixed yield issue if it were newly issued, the variable yield issue is treated as if it were reissued as a fixed yield issue at an issue price equal to the aggregate values of all bonds on the conversion date. If such conversion date occurs on a date other than a computation date, the conversion date may be treated as occurring on the next succeeding computation date. ${ }^{125}$

## D. Qualified Guarantees

## 1. Elements of Qualified Guarantees.

Bond yield is computed by taking into account payments made for a qualified guarantee, such as bond insurance or a letter of credit. ${ }^{126}$ The Regulations contain a number of requirements regarding what constitutes a qualified guarantee, including the character of the entity that issues a credit enhancement device, the terms of the device and the fees paid for it. The following considerations are discussed below, in the order listed: (a) risk shifting; (b) fees for the credit enhancement; (c) non-guarantee element; (d) purpose investment guarantees; and (e) allocation of guarantee fees.

## a. Risk Shifting.

The guarantee arrangement must create a guarantee in substance. The guarantee must impose a secondary liability that unconditionally shifts substantially all of the credit risk for all or part of the payments on a bond, such as payments of principal, interest, and redemption or tender prices on the bonds. Thus, the guarantor may not be a co-obligor with respect to the bonds and the guarantor must not expect to make any payments (other than under a direct-pay letter of credit or similar arrangement for which the guarantor will be reimbursed immediately). Commercially reasonable limits on credit risk, limits on payment in the event of default by the primary obligor or the bankruptcy of a long-term credit guarantor do not cause the guarantee to be conditional. The guarantor and related parties must not use more than $10 \%$ of the proceeds of the guaranteed bonds. ${ }^{127}$

## b. Fees for Credit Enhancement.

The fees for a guarantee must not exceed a reasonable, arm's-length charge for the transfer of credit risk. In complying with this requirement, the issuer may not rely on representations of the guarantor. ${ }^{128}$ The issuer must demonstrate expected savings as of the date the guarantee is obtained, and the issuer must reasonably expect that the present value of fees for the guarantee will be less than the present value of the expected interest savings on the issue as a result of the guarantee. ${ }^{129}$ A fee for a guarantee must not include any payment for any direct or indirect services

[^31]other than the transfer of credit risk, unless the compensation for those other services is separately stated, reasonable, and excluded from the guarantee fee. ${ }^{130}$

## c. Non-guarantee Element.

A qualified guarantee fee may not include fees for services other than the transfer of credit risk. Those fees, if any, must be separately stated and excluded from the yield computation. See Section 1.148-4(f)(4)(ii) for examples of these non-credit risk fees. Fees for the transfer of credit risk include, however, fees for the guarantor's overhead and other costs relating to the transfer of credit risk. ${ }^{131}$

## d. Purpose Investment Guarantees.

The guarantee of a purpose investment, except for guarantees of qualified mortgage loans and qualified student loans, may be a qualified guarantee of the issue. ${ }^{132}$ Purpose investments are investments including program investments that are acquired to carry out the governmental purpose of an issue. ${ }^{133}$ In a typical conduit issue, the loan of the bond proceeds by the issuer to the borrower is the purpose investment, from the perspective of the issuer. All payments on the purpose investment must reasonably coincide with payments on the underlying bonds, and the payments on the purpose investment must be unconditionally payable no more than six months before the corresponding interest payments and twelve months before the corresponding principal payments on the bonds. The guarantee of the purpose investment must be, in substance, a guarantee of the bonds allocable to the purpose investment and to no other bonds. ${ }^{134}$

## e. Allocation of Fees for a Qualified Guarantee.

The fee payments must be allocated in a manner that properly reflects the credit risk. Examples in the Regulations include allocating risk based on the ratio of total principal and interest paid and to be paid on a guaranteed bond to the total principal and interest paid on all bonds of the guaranteed issue. An allocation is not reasonable if a substantial portion of the fee is allocated to the construction portion of the issue. Reasonable letter of credit set-up fees may be allocated ratably during the initial term of the letter of credit. ${ }^{135} \mathrm{If}$, as a result of an investment of proceeds of a refunding issue in a refunding escrow, there will be a reduction in, or refund of, payments for a guarantee, the savings must be treated as a reduction in the payments of the refunding issue. ${ }^{136}$

[^32]
## E. Hedging Transactions

## 1. Introduction.

Generally, payments made or received under a "qualified hedge," such as an interest rate swap or forward purchase contract, are taken into account in determining yield on an issue. This rule applies solely for purposes of $\S \S 143(\mathrm{~g}), 148$, and $149(\mathrm{~d})$. Except to the extent that a special fixed yield treatment rule applies, as described in paragraph 2.c. below, an issue covered by a qualified hedge is treated as a variable yield issue.

## 2. Summary of Rules for Hedging Transactions.

## a. Definition of a Qualified Hedge.

For a bond issuer to treat a hedge as qualified, it must meet a number of very specific, technical requirements. These are summarized below.
(i) The contract is entered into primarily to modify the issuer's risk of interest rate changes with respect to a bond (a hedge). For example, the contract may be an interest rate swap, an interest rate cap, a futures contract, a forward contract, or an option. ${ }^{137}$ If a hedge provider makes a single payment to the issuer (e.g., an acquisition payment for an off-market swap, where the rate the issuer pays is above the market) in connection with the acquisition of a contract, the issuer may treat a portion of that contract as a hedge, if the acquisition payment to the issuer and the issuer's payments under the contract in excess of the on-market rate are separately identified in a certification of the hedge provider and not treated as payments on the hedge.
(ii) The contract does not contain a "significant investment element," which would be the case if a significant portion of any payment by one party relates to a conditional or unconditional obligation by the other party to make a payment on a different date (e.g., a payment for an off-market swap or prepayment of part or all of one leg of a swap, or an interest rate cap requiring the issuer's premium for the cap to be paid in a single, up-front payment).
(iii) The contract is entered into between the issuer and a hedge provider that is an unrelated party; the contract covers, in whole or in part, all of one or more groups of substantially identical bonds in the issue (i.e., all of the bonds having the same interest rate, maturity, and terms); and the contract is primarily interest based. ${ }^{138}$
(iv) The payments received by the issuer under the contract correspond closely in time to either (A) the specific payments being hedged on the hedged bonds or (B) specific payments required to be made pursuant to the bond documents (regardless of the hedge) to a sinking fund, debt service fund or similar fund maintained for the issue of which the hedged bond is a part.

[^33](v) The issuer's payments to the hedge provider are reasonably expected to be made from the same source of funds that the issuer would expect to use to pay the hedged bonds.
(vi) The contract must be identified by the actual issuer on its books and records maintained for the hedged bonds not later than 15 calendar days after the date on which the issuer and the hedge provider enter into the contract. See Section VII.E. 3 below. The Regulations are very specific as to what information must be included in the identification. Also, the issuer must indicate on its Form 8038 or 8038 -G that it entered into a hedge.

## b. Accounting for a Qualified Hedge.

Payments made or received by the issuer under a qualified hedge are generally treated as payments made or received on the hedged bonds and are taken into account in determining the yield on those bonds. Payments made or received include payments deemed made or received when a contract is terminated or deemed terminated. Payments reasonably allocable to the modification of risk of interest rate changes and to the hedge provider's overhead are included as payments made or received under a qualified hedge.

A termination of a qualified hedge includes any sale or other disposition of the hedge by the issuer or the acquisition by the issuer of an offsetting hedge. A deemed termination occurs when the hedged bonds are redeemed (but see E. 3 below regarding qualified hedge continuation in certain refundings) or when a hedge ceases to be a qualified hedge of the hedged bonds or if a transaction otherwise results in a deemed exchange of the hedge and a realization event under § 1001 to the issuer.

A payment made or received by an issuer to terminate a qualified hedge, including loss or gain realized or deemed realized, is treated as a payment made or received on the hedged bonds, as appropriate. The payment is reasonably allocated to the remaining periods originally covered by the terminated hedge in a manner that reflects the economic substance of the hedge. Except as provided below, when a qualified hedge is deemed terminated because the hedged bonds are redeemed, the fair market value of the qualified hedge on the redemption date is treated as a termination payment made or received on that date.

When hedged bonds are redeemed, any payment received by the issuer on termination of a hedge, including a termination payment or a deemed termination payment, reduces, but not below zero, the interest payments made by the issuer on the hedged bonds in the computation period ending on the termination date. The remainder of the payment, if any, is reasonably allocated over the bond years in the immediately preceding computation period or periods to the extent necessary to eliminate the excess. To the extent that the hedged bonds are redeemed with a refunding issue, the termination payment is accounted for as a payment on the refunding issue, rather than the hedged bonds. To the extent that the refunding issue is redeemed during the period to which the termination payment has been allocated, the payment is treated as a payment on the redeemed refunding issue. Section 1.148-4(h)(3)(iv) provides a safe harbor for allocating a hedge termination payment.
c. Special "Super-Integration" Rule Resulting in Fixed Yield Treatment for Certain Bonds.

If the issuer of variable yield bonds enters into a qualified hedge, the hedged bonds are treated as fixed yield bonds paying a fixed interest rate if the hedge meets certain specific requirements set forth in Section 1.148-4(h)(4). This is often called a "super-integrated hedge." Special rules apply if the hedge is terminated. See Section 1.148-4(h)(iii).

## d. Anticipatory Hedges.

Sometimes a bond issuer will enter into a hedge contract relating to an issue of bonds that the issuer expects to issue in the future, perhaps many months down the road. For example, an issuer may enter into a hedge in February to effectively lock in current market interest rates for an issue of bonds to be issued the following November. These hedges are commonly known as "anticipatory hedges." Section 1.148-4(h)(5) provides special rules for these hedge transactions, but this topic is beyond the scope of a basic arbitrage discussion.

## 3. Impact of 2016 Final Regulations on Hedges.

The 2016 Final Regulations revised several rules relating to qualified hedges. The size and scope of a qualified hedge are limited to a level reasonably necessary to hedge the issuer's risk of interest rate changes on the hedged bonds. Hedge payments are treated as corresponding close in time to the payment on the hedged bonds if the payments are made within 90 calendar days of each other. The amount of any termination payment (for a deemed or actual termination of a hedge) is equal to the fair market value of the hedge on the termination date. The time limit for an issuer to identify a hedge increased from 3 days to 15 calendar days. The 2016 Final Regulations also require that, as part of the identification of a qualified hedge, the hedge provider certify that (1) the terms of the hedge were agreed to in a bona fide arm's-length transaction, (2) the rate payable by the issuer under the hedge was comparable to the rate that the hedge provider would have quoted in similar circumstances, (3) no payments to third parties are being made except as provided in the hedge documents, and (4) any amounts paid or received pursuant to the hedge do not include any payments other than payments reasonably allocable to the modification of risk of interest changes and the hedge provider's overhead.

In addition, the 2016 Final Regulations expanded the ability to make yield reduction payments under Section 1.148 -5(c) by allowing those payments with respect to nonpurpose investments in an advance refunding escrow, if (1) the issuer has entered into a variable-to-fixed interest rate swap with respect to the variable yield bonds of the issue allocable to the advance refunding escrow, (2) the swap covers a period at least as long as the escrow, and (3) the issuer restricts the yield on the escrow to a yield not greater than the yield on the hedge bond issue, based on the fixed leg of the swap.

The 2016 Final Regulations also removed some complexity related to modifications of a hedge or the continuation of a hedge in the case of a refunding by providing that if the modified hedge or the hedge associated with the refunded bonds continues to be a "qualified hedge," then the "off-market" element of the hedge is disregarded and no deemed termination results. The modified hedge or continuing hedge in a refunding must be identified within the time period
measured from the date of the modification or date of issue of the refunding bonds and without regard to the requirement for a hedge provider's certification.

## 4. Reissuance; Notice 2008-41.

IRS Notice 2008-41 ${ }^{139}$ provides that a qualified hedge will not be terminated under Section 1.148-4(h) upon a modification of the terms of the Bonds if (1) as of the date of the modification, the modification is not reasonably expected to change the yield on the affected hedged bonds by more than $0.25 \%$, and (2) the payments and receipts on the qualified hedge, as modified, are fully taken into account as adjustments to the yield on those hedged bonds under $\S$ 148. The Notice also provides that, for purposes of § 148, any premium received by an issuer pursuant to a conversion of the interest rate on a qualified tender bond to a fixed interest rate will be treated as additional sale proceeds of the bonds.

## VIII. EXCEPTIONS TO REBATE

The exceptions to rebate are presented in the following order:

## SPENDING EXCEPTIONS

A. Six-Month Spending Exception
B. Six-Month Spending Exception for Working Capital Financings
C. 18-Month Spending Exception
D. Two-Year Construction Spending Exception

## ISSUER/ISSUE EXCEPTIONS

E. $\quad \$ 5$ / $\$ 15$ million Small Issuer Exception

## OTHER REBATE EXCEPTIONS

F. Investments in Bona Fide Debt Service Funds
G. Investments in Tax-Exempt Obligations
H. Other Miscellaneous Exceptions (including yield restriction)

## SPENDING EXCEPTIONS

## A. Six-Month Spending Exception

## 1. General.

If the gross proceeds of a bond issue are fully expended for the governmental purposes of the issue within six months of the issue date of the bonds, the bond issue will be treated as meeting the rebate requirements, as long as any gross proceeds that are not required to be spent, such as proceeds in a 4 R Fund (other than earnings on amounts in any bona fide debt service fund), continue to meet the rebate requirement. ${ }^{140}$ Use of the six-month exception is not mandatory. Amounts not required to be spent also include gross proceeds arising after six months that were not reasonably expected to arise as of the issue date, payments received on purpose investments and earnings on those payments, and amounts representing repayments of grants. ${ }^{141}$ Expected future accumulations in an invested sinking fund other than a bona fide debt service fund or 4R Fund might prevent the use of a spending exception. The governmental purposes of the issue may include payment of interest, but not principal, on the issue. Section 148(f)(4)(B)(iv) and Section 1.148-7(b)(3). The de minimis rule contained in Section 1.148-7(b)(4) does not apply under the six-month exception.

## 2. Additional Six Months.

For governmental-purpose issues and qualified 501(c)(3) bonds, the six-month spending period is extended for an additional six months for an amount not exceeding $5 \%$ of the proceeds of the issue. ${ }^{142}$

## 3. Refunding Issues.

The only spending exception for which a refunding issue is eligible is the 6-month exception. A refunding issue meets the six-month exception only if all proceeds of the issue (other than transferred proceeds of the issue and proceeds not required to be spent, such as proceeds in a 4R Fund) are spent within six months of the issue date of the refunding issue. Proceeds of a prior tax-exempt issue that become transferred proceeds of the refunding issue continue to be treated as unexpended gross proceeds of the prior issue for purposes of the spending exceptions. Even if the refunding issue meets the six-month exception, transferred proceeds will be subject to rebate unless the prior issue meets its own spending exception. See Section 1.148-7(b)(1)(ii). Refunding and non-refunding portions of a multipurpose issue are analyzed separately. Most current refunding issues will meet this exception.

## 4. Pooled Financings.

For pooled financings, the general rule is that the six-month spending period begins on the issue date of the pool bonds (not on the date of the loan to the borrower), and the gross proceeds are not expended until the gross proceeds are spent for their ultimate purposes (rather than on the

[^34]making of a loan). But Section 1.148-7(b)(6) permits the pooled bond issuer to elect (on or before the issue date) to apply the spending requirements separately to each loan to a conduit borrower, as discussed below under the two-year construction spending exception. If the election is made and proceeds are lent to the ultimate borrower, the six-month spending period will begin for that loan on the earlier of (A) the date the loan is made or (B) the date 12 months from the issue date of the pooled bonds.

## B. Six-Month Spending Exception for Working Capital Financings

## 1. Only Spending Exception Applicable.

The only spending exception available to a bond issue, a substantial portion of the proceeds of which will be used for non-capital expenditures, is the 6-month exception. This does not apply to working capital expenditures that are part of a capital project under a de minimis rule.

## 2. Spending on Restricted Working Capital is on a Proceeds Spent Last Basis.

Proceeds of a tax-exempt bond issue in general may only be treated as spent for non-capital purposes if at the time of the expenditure there are no other available funds from which the expenditure can be made. This rule does not apply to certain cases including extraordinary non-recurring expenditures and de minimis amounts that are treated as part of a capital project. If an exception does not apply, then the 6-month rebate spending exception is in general tested based on the restricted expenditure rule. The restricted expenditure rule means that expenditures occur only and to the extent of cash flow deficits on the day of the expenditure. Thus, to meet the 6 -month expenditure rule, the issuer must experience a cumulative cash flow deficit in excess of the amount of proceeds of the issue as of a date no later than 6-months after the date of issue. In general, this will be satisfied if the balance of all available funds including the proceeds of the issue and the reasonable reserve is no greater than the applicable reasonable reserve amount. Also note that the issuer must not expect to have "other replacement proceeds" as a result of the bonds being outstanding longer than necessary without appropriate remediation.

## 3. Tax and Revenue Anticipation Notes.

One common type of tax-exempt restricted working capital bond issue is the tax or revenue anticipation note, often abbreviated TRAN, TAN or RAN. This term is used in the Code and there are special rules related to the 6 -month exception for TRANs. Unfortunately, the term TRAN is not defined in the Code or in any regulations or other IRS authority. It is commonly understood to refer to a short-term instrument, generally no longer than 13 months (or perhaps in some situations, 2 years). A long-term bond issued for working capital purposes is generally not treated as a TRAN.

TRANs are not eligible for the extra 6-months allowed under the exception for the expenditure of the last $5 \%$ of an issue of governmental bonds. Also, there is a special statutory safe harbor for determining that an issue of TRANs meets the 6-month exception.

## 4. The Statutory Safe Harbor.

For the purpose of applying the six-month spending exception to rebate to TRANs (but not long-term working capital financings), § 148(f)(4)(B)(iii) carves out a special safe harbor in which TRANs will be treated as meeting the six-month spending exception to rebate. If, as of the date six months after the issue date of the TRANs, the cumulative cash flow deficit of the issuer computed without regard to the reasonable working capital reserve exceeds $90 \%$ of the proceeds of the issue, all the net proceeds of the issue (proceeds less amounts deposited in a 4R Fund for the issue), plus investment earnings thereon, will be treated as spent for the governmental purposes of the issue in satisfaction of the six-month spending exception. The statutory safe harbor provides an alternative method of satisfying the six-month exception. The legislative history of the 1986 Tax Act makes it clear that the statutory safe harbor is optional, not mandatory. ${ }^{143}$ An issuer would generally apply the statutory safe harbor if its reasonable working capital reserve was less than $10 \%$ of the amount borrowed.

## 5. Cumulative Cash Flow Deficit Definition.

"Cumulative cash flow deficit" for this purpose means the excess of actual expenses paid during the period that would ordinarily be paid out of or financed by anticipated tax or other revenues, over the aggregate "amount available" (other than from the proceeds of the issue ${ }^{144}$ but not excluding a reasonable working capital reserve) during such period for the payment of such expenses. Section $148(f)(4)(B)(i i i)(I I) .{ }^{145}$ The defined deficit must actually occur within the six-month period. If the actual deficit is less than $90 \%$ of the proceeds of the issue for the full six months, the issue will not qualify for the statutory safe harbor. In such a case, the reasonable working capital reserve must be used to compute rebate or an exception to rebate.

## 6. Amount Available.

The amount available to an issuer for this purpose includes cash, investments, and other amounts held in accounts or otherwise by the issuer or a related party if those amounts may be used by the issuer for working capital expenditures of the type financed without legislative or judicial action and without a legislative, judicial, or contractual requirement that those amounts be reimbursed, and, except as otherwise provided, available amount excludes proceeds of any issue. Section 1.148-6(d)(3)(iii)(A). For the purpose of the TRANs safe harbor, an otherwise permitted "reasonable working capital reserve" is specifically treated as part of the available amount. Section 1.148-6(d)(3)(iii)(D).

[^35]
## 7. Allocation of Proceeds to Expenditures.

Section 1.148-6(d)(3) provides that gross proceeds of an issue and available amounts may be allocated to working capital expenditures only under a "gross-proceeds-spent-last" method. Thus, gross proceeds are treated as spent for working capital expenditures only to the extent the expenditures exceed the available amounts as of that date. ${ }^{146}$ If the safe harbor is not met, the available amounts for this purpose excludes the reasonable working capital reserve as defined in Section 1.148-6(d)(3)(iii)(B).

## 8. $\$ 5,000,000$ Small Issuer Exception.

TRANs are eligible for the small issuer exception to rebate discussed below. ${ }^{147}$ Thus, small issuer TRANs may be sized for the deficit plus a reasonable working capital reserve, not to exceed $5 \%$ of the prior fiscal year's working capital expenditures. See Section 1.148-6(d)(iii).

## 9. Application of Traditional Six-Month Spending Exception.

Section 1.148-6(d)(3) provides issuers of working capital financings with an alternative to the TRANs statutory safe harbor, which may be of particular interest for TRANs issuers that do not experience the requisite $90 \%$ deficit. Under Section 1.148-6(d)(3), bond proceeds may be spent for working capital purposes on a "proceeds-spent-last" basis, determined with respect to "available amount" (as described above). Under this rule, "available amounts" do not include a reasonable working capital reserve as defined in Section 1.148-6(d)(3)(iii)(B). See PLR 200446006.

An issuer will generally use this traditional version of the six-month spending exception if the total amount of the TRAN issue is less than $50 \%$ of prior fiscal year expenditures (whether capital or working capital expenditures) that are paid out of current revenues.

A reasonable working capital reserve may not exceed an amount equal to $5 \%$ of the issuer's actual working capital expenditures in the previous fiscal year. ${ }^{148}$ In other words, unlike the TRANs safe harbor, in which the deficit must be measured assuming all available amounts are spent first, the six-month spending exception would allow an issuer to treat its bond proceeds as spent on working capital on a "proceeds-spent-last" basis while retaining a reasonable working capital reserve. Section 1.148-6(d)(3)(ii) sets out exceptions from the "proceeds-spent-last" rule in Section 1.148-6(d)(3)(i) for certain de minimis expenditures and for extraordinary, nonrecurring expenditures (e.g., casualty losses).

[^36]
## C. 18-Month Spending Exception

## 1. General Requirements.

Under Section 1.148-7(d), the 18-month exception borrows elements of both the two-year construction spending exception discussed in Section VIII.D below and the six-month spending exception in VIII.B above. An issue will be treated as meeting the rebate requirement if the following requirements are met:

## a. Spending Schedule.

The gross proceeds (including investment earnings) of the issue must be spent for the governmental purposes of the issue at least as fast as the following schedule: (i) $15 \%$ within six months of the issue date; (ii) $60 \%$ within one year of the issue date; and (iii) $100 \%$ within 18 months of the issue date. Section 1.148-7(d)(1)(i). For purposes of this exception, Section 1.148-7(d)(3)(i) provides that gross proceeds do not include amounts in a bona fide debt service fund, a 4R Fund, amounts that are not expected to be gross proceeds but arise after the end of the 18 -month spending period, payments received under any purpose investment of the issue, and repayments of grants (the "gross proceeds exclusions"), and those amounts do not have to be spent within the 18 -month spending period. For purposes of the six-month and twelve-month targets, the reasonably expected earnings as of the date of issue for the entire expenditure period must be included. This means that an issuer should certify as to its expected investment earnings in a document executed at the time of issuance. For purposes of the $100 \%$ requirement in 18 months, actual earnings are used, whether they are more or less than originally expected.

## b. Certain Proceeds Exempt; Temporary Period.

The gross proceeds of the issue that need not be spent within the 18-month spending period, such as proceeds in a 4R Fund (other than earnings on a bona fide debt service fund), must comply with the rebate requirement. Section 1.148-7(d)(ii). All of the gross proceeds of the issue, other than the gross proceeds exclusions, must qualify for the initial three-year or five-year temporary period provided under Section 1.148-2(e)(2) for capital project financings to qualify for the 18-month exception. Section 1.148-7(d)(1)(iii).

## 2. Other Rules.

The 18-month exception extends the 18 -month spending period to 30 months for amounts that qualify as a "reasonable retainage," with the same meaning as provided for the two-year construction spending exception (Section VIII.D below). Section 1.148-7(d)(3). For purposes of determining compliance with the six-month and 12-month spending periods, the amount of investment earnings included is based on the issuer's reasonable expectations as of the issue date. Section 1.148-7(d)(4). The 18 -month exception is not applicable to any portion of an issue if another portion of that issue is treated as meeting the rebate requirement under the two-year construction spending exception. Section 1.148-7(d)(4).

## 3. De minimis Rule.

The 18 -month exception has the same de minimis rule that applies to the two-year construction spending exception. Under the de minimis rule, the failure to spend an amount that does not exceed the lesser of $3 \%$ of the issue and $\$ 250,000$ will not exclude an issue from qualifying for the 18 -month exception, as long as the issuer continues to exercise due diligence to complete the project financed. Section 1.148-7(b)(4).

## D. Two-Year Construction Spending Exception

## 1. General.

Section 148(f)(4)(c) provides an exception to the arbitrage rebate rules for the "available construction proceeds" ("ACP") of "construction issues," if the proceeds are expended pursuant to a prescribed maximum time schedule, generally within a two-year period (the "two-year rule"). To qualify for the two-year rule, the bonds must be (A) governmental bonds, (B) qualified $501(\mathrm{c})(3)$ bonds, or (C) private activity bonds issued to finance property to be owned by a governmental unit or a 501 (c)(3) organization. Section 1.148-7(f)(3)(i). ${ }^{149}$ Obligations issued by "on-behalf-of" issuers can qualify as construction issues, with the issuer being treated as a governmental unit. Section 1.148-7(f)(3)(i).

If the expenditure schedule described below is met, the ACP are not subject to arbitrage rebate. Section 148(f)(4)(C)(i); Section 1.148-7(e). The two-year rule applies only to ACP; gross proceeds that are not ACP are, therefore, subject to rebate, unless another exception from rebate is applicable to them. Section $148(f)(4)(C)(x v i i)$. If the construction issue qualifies for the sixmonth exception, then the two-year rule need not be used. Section 1.148-7(a)(2). Finally, even though the issue may qualify for this rebate exception, an issuer is not required to apply the exception, and may instead apply the arbitrage rebate requirement of § 148(f)(2), except where the issuer has elected to pay the penalty in lieu of rebate, as described below. See Section 1.148-7(a)(3).

## 2. Construction Issue.

A "construction issue" is an issue that is not a refunding issue and with respect to which at least $75 \%$ of the ACP are to be used to finance construction expenditures. Section $148(\mathrm{f})(4)(\mathrm{C})(\mathrm{iv}) .{ }^{150}$ The Regulations provide, however, that for purposes of the two-year rule, the issuer may elect, on or before the issue date, to apply all of the provisions based on actual facts. Section 1.148-7(f)(2).

[^37]
## 3. Construction Expenditures.

The statute does not contain a definition of "construction" other than to provide that it includes reconstruction and rehabilitation. Section 148(f)(4)(C)(iv). The Regulations, however, define "construction expenditures" as capital expenditures ${ }^{151}$ that are allocable to the cost of:
a. real property (other than expenditures to acquire any interest in land or other existing real property); see Section 1.148-7(g)(2) (turnkey contract);
b. constructed personal property (generally, tangible personal property built to an issuer's specifications, with several detailed requirements; see Section 1.148-7(g)(3)); or
c. specially developed computer software that is functionally related and subordinate to real property or constructed personal property; see Sections 1.148-7(g)(4) and 1.148-7(e)(3) (definitions of real property and tangible personal property).

## 4. Apportioning of Multipurpose Issues.

The Regulations include detailed rules under which an issuer may divide a multipurpose issue into a refunding issue and a nonrefunding issue and may further divide the non-refunding portion of a multipurpose issue into two issues: a construction issue and a non-construction issue, in order for one of the issues to qualify for the two-year rule and, potentially, the other for another exception to rebate. Section 148(f)(4)(C); Section 1.148-7(j). If such a bifurcation election is made, the non-construction portion must not include any expected construction expenditures and the construction portion must be at least $75 \%$ for construction.

## 5. Available Construction Proceeds.

ACP is defined as the sum of: (i) an amount equal to the issue price of the construction issue; (ii) earnings on amounts invested in a 4R Fund funded from other than bond proceeds; and (iii) earnings on (i) and (ii); minus (iv) the amount of the issue price on deposit in a 4R Fund; minus (v) the costs of issuance financed by the bond issue; ${ }^{152}$ and (vi) minus earnings on amounts in a 4 R Fund after the earlier of the close of the two-year period or the date construction is substantially completed. Section 148(f)(4)(C)(vi); Section 1.148-7(i)(1). ${ }^{153}$ Earnings include earnings on any investment in tax-exempt bonds. Section 1.148-7(i)(1). Pre-issuance accrued interest and earnings thereon may be disregarded. Id. Amounts that are not gross proceeds because of application of the "universal cap" rules of Section 1.148-6(b)(2) are not ACP. Id.

## 6. Treatment of 4R Fund Earnings.

Under the two-year rule, absent an election to the contrary by the issuer, investment earnings on amounts in a 4R Fund generally are not subject to rebate until the earlier of two years after the issue date and the date that construction is substantially complete, because those amounts

[^38]are part of ACP. Instead, they are subject to the same spending schedule as other ACP of the issue. But after the earlier of the date construction is substantially completed or the end of the two-year period, those earnings become subject to rebate because they are no longer part of ACP. Section 148(f)(4)(C)(vi)(II) and Section 1.148-7(h)(2).

The issuer may also elect to rebate any arbitrage on amounts in a 4 R Fund from the issue date. Section $148(f)(4)(\mathrm{C})(\mathrm{vi})(\mathrm{IV})$ and Section 1.148-7(h)(2). For example, this election may be desirable when the 4 R Fund is net funded, so that earnings on the 4 R Fund are to be retained in the fund (rather than expended for the governmental purpose of the issue) until the 4 R Fund reaches its proper size. For purposes of determining compliance with the spending requirements for each of the first three spending periods, ACP includes future earnings that the issuer reasonably expects as of the issue date for the entire two-year period. Section 1.148-7(h)(3).

## 7. Spending Requirements.

To utilize the two-year rule fully, ACP must be spent for the governmental purposes of the issue at least as fast as the following schedule: (i) $10 \%$ within the six-month period beginning on the date the bonds are issued; (ii) $45 \%$ within the one-year period beginning on the date the bonds are issued; (iii) $75 \%$ within the 18 -month period beginning on the date the bonds are issued; and (iv) $100 \%$ within the two-year period beginning on the date the bonds are issued.

The $100 \%$ test at the end of the second year will be deemed met if no more than $5 \%$ of ACP is kept as a reasonable retainage, as defined below, and those proceeds are spent within the three-year period beginning on the issue date. Section 148(f)(4)(C)(ii) and Section 1.148-7(e)(2). The Regulations define "reasonable retainage" as amounts withheld for reasonable business purposes, such as to ensure or promote compliance with the terms of one or more construction contracts (e.g., "punch list" items), where amounts are not yet payable, or in which the issuer determines that an actual dispute exists regarding either completion of construction or payment. Section 1.148-7(h). In addition to the exception for reasonable retainage, the Regulations contain a de minimis rule for failures to meet the final ( 24 month) spending target. Under this rule, which may be used in conjunction with the $5 \%$ "reasonable retainage," a failure to spend an amount that does not exceed the lesser of $3 \%$ of the issue price or $\$ 250,000$ is disregarded if the issuer exercises due diligence to complete the project. Section 1.148-7(b)(4).

## 8. Special Rules for Refunding Bonds and Refunded Bonds.

For purposes of the spending exceptions to rebate only, including the two-year rule (and including the penalty in lieu of rebate), the proceeds of the refunded issue never become transferred proceeds of the refunding issue, but rather retain their original characterization and temporary period (the latter for purposes of spend-down and election timing but not, in the case of advance refundings, for purposes of yield restriction). Any failure to pay a required penalty (discussed below) that results in loss of tax exemption relates both to the original bonds (to the extent within the statute of limitations) and to all refunding bonds. Section 148(f)(4)(C)(x). Transferred proceeds with respect to which either the $1.5 \%$ penalty or the 3 percent penalty has been paid are also not subject to rebate. Section 148(f)(4)(C)(xiii)(III).

## 9. Penalty In Lieu of Rebate.

## a. In General.

If the issuer fails to meet the spending rules specified above, absent an election to the contrary, the issuer will be obligated to pay rebate in accordance with the general rules of $\S 148(\mathrm{f})(2)$. Section $148(\mathrm{f})(4)(\mathrm{C})(\mathrm{i})$. The issuer is permitted, however, to elect to pay a penalty in lieu of rebate. Section $148(f)(4)(C)(v i i)$; Section $1.148-7(k)$. The election to pay this $1.5 \%$ per 6 months penalty must be made by the issue date of the bonds and continues to apply unless terminated, all ACP are spent, or the final maturity of the issuer and any refunding issues is reached. Sections 148(f)(4)(C)(ix) and 148(f)(4)(C)(viii); Section 1.148-7(k)(1).

## b. Amount of Penalty.

Section 148(f)(4)(C)(vii) and the Regulations provide that the penalty equals $1.5 \%$ of the amount of missed or under-spent expenditures for each six months during the two-year period. For example, if bonds with ACP (aside from investment proceeds) of $\$ 10$ million are issued, investment proceeds at the end of the first six months are $\$ 300,000$, and investment proceeds for the remainder of the construction period are expected to be $\$ 900,000$ (for a total of $\$ 11,200,000$ ), $10 \%$ or ACP in the amount of $\$ 1,120,000$ is required to be spent by the close of the first six-month period. If only $\$ 800,000$ is spent by the end of the first six-month period, the penalty would be $\$ 4,800((\$ 1,120,000-\$ 800,000) \times 1.5 \%)$. Any penalty must be paid to the IRS within the 90 days following the six-month period for which the penalty applies. Section 148(f)(4)(C)(xvi).

Depending on interest rates and the amounts of unspent proceeds, the $1.5 \%$ penalty may be significantly more or less than any rebate that would be owed. Unless the running of the $1.5 \%$ penalty is tolled by payment of the 3 percent penalty described below, the penalty ceases to apply only after the bonds (including any refunding bonds) have been retired. Although the payment of interest is a governmental purpose constituting an expenditure for purposes of the two-year rule, the redemption or purchase of bonds is not, either for purposes of the expenditure rules or for purposes of the calculation of requisite penalties. Section 148(f)(4)(C)(xii); Section 1.148-7(b)(3). In PLR 9526002, the IRS ruled in technical advice that the $1.5 \%$ penalty cannot be reduced even if construction delays are encountered that are caused by natural disasters outside of the control of the issuer, and the penalty continues to accrue until the issuer elects to terminate the penalty as described below.

## c. Tolling the Penalty.

The issuer may elect to toll the running of the $1.5 \%$ penalty by paying a separate three-percent penalty on unspent ACP. Section 148(f)(4)(C)(viii); Section 1.148-7(k)(1). The issuer must elect to pay the 3 percent penalty not later than 90 days after the earlier of (i) expiration of the initial temporary period applicable to the bonds or (ii) substantial completion of all or a portion of the construction to be financed with the bonds. Sections 148(f)(4)(C)(viii)(I) and 148(f)(4)(C)(ix); Section 1.148-7(l)(1).

## d. Payment of Penalties.

The $1.5 \%$ and $3 \%$ penalties are the exclusive alternatives to the payment of rebate automatically available to the issuer. Each penalty payment is subject to the rules relating to payment of rebate under Section 1.148-3(g). Failure to rebate or pay such penalties is subject to the rules of Sections 1.148-3(h)(1), (2), and (3). ${ }^{154}$

## 10. Application to Pooled Bonds.

The ACP of pooled bonds that are construction issues automatically qualifies for the two-year rule. To facilitate the use of the two-year rule for the ACP of pooled bonds, § 148(c)(2) was amended by the 1989 Act to provide that, if pooled bonds are issued and part of the issue is used to make or finance loans for construction expenditures, that portion of the bonds is entitled to a two-year temporary period, in the hands of the pooled issuer, rather than six months as provided under prior law. Section 148(c)(2)(C).

The Regulations provide that an issuer can elect, on or before the issue date, to apply the spending exceptions separately to each conduit loan. If this election is made, then (1) the spending requirements for a loan begin on the earlier of the date the loan is made or the first day following the one-year period beginning on the issue date of the pooled financing issue, and (2) the rebate requirement (and none of the spending exceptions) applies to the gross proceeds of the issue before the date on which the spending requirements begin. Section 1.148-7(b)(6)(ii). If an issuer makes this election, it may make all elections under the two-year rule separately for each loan, Section $1.148-7(b)(6)(i i)(C)$, and may pay rebate with regard to some conduit loans and the $1.5 \%$ penalty for other conduit loans from the same pooled financing issue. The $1.5 \%$ penalty is computed separately for each conduit loan. Section 1.148-7(b)(6)(ii)(B).

As is the case with other construction issues, if a borrower in the pool fails to meet the expenditure requirements, the issuer must pay rebate in accordance with the general rules of Code $\S 148(\mathrm{f})(2)$, unless it has elected to pay the $1.5 \%$ penalty in lieu of rebate. This election must be made on or before the date the pooled bonds are issued and is irrevocable. A pooled issuer, however, may elect to terminate the $1.5 \%$ penalty for a loan rather than for the entire issue.

## ISSUER / ISSUE EXCEPTIONS

## E. Small Issuer Exception

## 1. General.

Section $148(\mathrm{f})(4)(\mathrm{d})$ provides that no rebate is required with respect to bonds issued to finance governmental activities of certain small issuers (the "Small Issuer Exception"). The only

[^39]regulatory guidance on this rebate exception is contained in Section 1.148-8. To be eligible for the small issuer exception, the following requirements must be met:

## a. General Taxing Power.

The bonds must be issued by a governmental unit with general taxing powers, interpreted under Section 1.148-8(b) as the power to impose taxes of general applicability that, when collected, may be used for general purposes of the issuer. The taxing power may be limited to a specific tax, provided that its applicability is not limited to a small number of persons. The taxing power may be subject to procedural limits, such as voter approval requirements, but may not be contingent on approval by another governmental unit. An entity, such as a school district, that can cause a tax to be collected on its behalf, should generally be treated as qualifying even if the amounts and types of taxes are somewhat limited by State law.

## b. No Private Activity Bonds; Use for Local Activities.

No private activity bonds qualify under this exception. Section 148(f)(4)(D)(i)(II). In addition, at least $95 \%$ of the net proceeds of the bond issue are "to be used" for the local governmental activities of the issuer or a governmental unit entirely within the jurisdiction of the issuer. Section $148(\mathrm{f})(4)(\mathrm{D})(\mathrm{i})(\mathrm{III})$. This test is a reasonable expectations test with respect to the use of proceeds. It appears that a governmental unit contained within the jurisdiction of a larger unit may have difficulty in lending the proceeds to the larger unit and still qualifying as having met this jurisdictional test.

## c. $\$ 5,000,000 / \$ 15,000,000$ Limit.

Under the small-issuer exception, an issuer is a qualified small issuer if the aggregate face amount of all tax-exempt bonds (other than private activity bonds) issued by the small issuer and all subordinate entities of the issuer during the calendar year of the issue is not reasonably expected to exceed $\$ 5,000,000$. Section $148(f)(4)(\mathrm{D})(\mathrm{i})(\mathrm{IV})$. The $\$ 5,000,000$ has since been increased to up to $\$ 15,000,000$ in the case of bonds financing the construction of public school facilities. See Section VIII.E.1.d below. Current refunding bonds are excluded from this limitation as described below.
(i) For these purposes, the aggregation rule in § 148(f)(4)(D)(ii) and Section 1.148-8(c) treats an issuer and all subordinate entities, and an issuer and all entities that issue on behalf of the issuer, as one issuer. Referred to as an "upward attribution" or aggregation rule, this rule requires a review of the relationships an issuer has with other entities. An issuer is subordinate to another governmental unit if it is directly or indirectly controlled by another entity within the meaning of Section 1.150-1(e). ${ }^{155}$ Mere geographic inclusion of one entity within another does not create subordination if the smaller entity derives its powers independently from the larger entity and is not subject to significant control by the larger entity. On-behalf-of entities are presumably defined by the concepts contained in Rev. Rul. 57-187, 19571 C.B. 65 (Alabama industrial development board); Rev. Rul. 63-20, 19631 C.B. 24; Rev. Proc. 82-26, 19821 C.B. 476, etc. For application of these concepts, see PLR 8821008 (February 22, 1988).

[^40](ii) Section 148(f)(4)(D)(ii)(III) and Section 1.148-8(c)(2)(iii) require downward attribution when a smaller entity is formed, or availed of, to avoid aggregation. But the aggregation rule of § 148(f)(4)(D)(ii) and Section 1.148-8(c)(2)(ii)(B) permit certain allocations and activities, as follows:
(a) An issuer with general taxing powers may allocate irrevocably its $\$ 5,000,000$ cap to a subordinate entity (including an on-behalf-of issuer); the allocation must bear a reasonable relationship to the benefit to the subordinate entity from the bond issue, taking into account the manner in which (1) proceeds are to be distributed; (2) debt service is to be paid; (3) the facility is to be owned; (4) the use or output of the facility is to be shared; and (5) the costs of operation and maintenance are to be shared; and
(b) An issuer with general taxing powers may issue bonds to make loans to other entities with general taxing powers that are not subordinate to the issuer without using any of the issuer's $\$ 5,000,000$ cap (although it should use the borrower's cap).

## d. Bigger "Small Issue" Bonds for School Construction.

The Taxpayer Relief Act of 1997 (the "1997 Act") increased the $\$ 5,000,000$ limit by the lesser of $\$ 5,000,000$ or "so much of the aggregate face amount of the bonds as are attributable to financing the construction . . . of public school facilities" for bonds issued after 1997. ${ }^{156}$ The Economic Growth and Tax Relief Reconciliation Act of 2001 (the "2001 Act") ${ }^{157}$ replaced the " $\$ 5,000,000$ school" amount with $\$ 10,000,000$, effectively expanding the small issue rebate exception to $\$ 15$ million (for public school construction issues). Section 148(f)(4)(D)(vii). The amendments made by the 2001 Act applied to bonds issued after December 31, 2001, but did "not apply to taxable, plan or limit years beginning after December 31, 2010." ${ }^{158}$ The amendments made by the 2001 Act were extended through the end of 2012 by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, ${ }^{159}$ and were finally made permanent by the American Taxpayer Relief Act of 2012. ${ }^{160}$

## 2. Refundings.

Current refunding bonds are not taken into account in determining whether the issuer is a qualified small issuer for the calendar year, but only to the extent that the amount of the refunding bonds does not exceed the outstanding amount of the refunded bonds. Section 148(f)(4)(D)(iii). Advance refunding bonds are fully included in calculating the $\$ 5,000,000$ limit. ${ }^{161}$ A refunding issue itself is not eligible for the small issuer exception unless the aggregate face amount does not exceed $\$ 5,000,000$, the refunded bonds had qualified for the small issuer exception, the average maturity date of the refunding bonds is not later than the average maturity of the refunded bonds,

[^41]and the maturity date of the refunding bond is not later than 30 years after original bond was issued. Section 148(f)(4)(D)(v). For refunding issues without reserve funds and without transferred proceeds and with a bona fide debt service fund, the limitations may be irrelevant because a current refunding generally will qualify for the 6 -month exception to rebate.

## 3. Pooled Bonds.

Under Section 1.148-8(d), in the context of a pooled financing in which the borrower otherwise meets the small issuer exception, the small issuer exception will be available to the proceeds of the pooled issue in the hands of the small issuer borrower. The pooled financing may mix large and small issuers and treat each borrowing separately for purposes of available rebate exceptions. A loan to a conduit borrower qualifies for the small issuer exception, however, only if the bonds of the pooled financing are not private activity bonds, none of the loans to conduit borrowers are private activity bonds, and the loan to the conduit borrower meets all the requirements of the Small Issuer Exception. The issuer of the pooled financing issue is, however, subject to the rebate requirement for any unlent gross proceeds.

## 4. TRANs.

TRANs are eligible for this exception. See PLR 8740027 (July 7, 1987).

## OTHER REBATE EXCEPTIONS

## F. Bona Fide Debt Service Fund Exception

Amounts earned on a bona fide debt service fund are not taken into account in computing rebate if the gross earnings on the fund for a bond year are less than $\$ 100,000$. For governmental bonds with an average maturity of at least five years and fixed interest rates during the term of the issue, the $\$ 100,000$ limit is ignored, and all gross earnings on the fund are exempt from rebate. ${ }^{162}$ In addition, an issue is treated as satisfying the $\$ 100,000$ earnings limit if the average annual debt service does not exceed $\$ 2,500,000 .{ }^{163}$ Private activity bonds (including qualified 501(c)(3) bonds) must observe the $\$ 100,000$ earnings limit.

All bona fide debt service funds for a single bond issue are treated as a single fund. Conversely, a single fund serving two or more bond issues is treated as a series of separate funds. Section 1.148-6(e)(6) requires such a fund to be allocated ratably among the issuers in accordance with one of the following methods: (1) the relative values (determined in accordance with Section 1.148-4(e)) of the issues; (2) the remaining maximum annual debt service requirements of the issues; or (c) the original stated principal amounts of the issues.

## G. Exception for Tax-Exempt Investments

Because the rebate requirement applies only to earnings on "nonpurpose investments," earnings on investments that are not nonpurpose investments are free from the rebate requirement. Section $148(\mathrm{f})(6)$ defines the term "nonpurpose investment" as any investment property that is

[^42]acquired with gross proceeds of an issue and that is not acquired to carry out the governmental purposes of the bond issue. Section 148(b)(3) excludes any "eligible tax-exempt bond" (including an interest in a regulated investment company to the extent that at least $95 \%$ of the income to the holder of the investment is interest that is excludable from gross income under § 103(a)(i) and Demand Deposit SLGS) ${ }^{164}$ from the definition of "investment property," and thus from the definition of "nonpurpose investment." 165 But under § 148(b)(3)(b), "investment property" does include "specified private activity bonds" as defined in § 57(a)(5)(C) (any private activity bond other than a qualified 501(c)(3) bond, commonly referred to as an "AMT bond").

An interest in a regulated investment company (mutual fund) is treated as a tax-exempt investment if at least $95 \%$ of the income to the holder thereof is tax-exempt interest. ${ }^{166}$ This test for mutual funds is quite restrictive because even if $100 \%$ of the assets of the mutual fund are non-AMT tax-exempt bonds, more than $5 \%$ of the income to the holder may be taxable capital gain.

## H. Exception for Purpose Investments

The definition of "proceeds" under Section 1.148-1(b) states that an issuer's receipts from purpose investments under any of the permitted spreads found in Section 1.148-2(d) or for the recoupment of qualified administrative costs are not "proceeds" and, thus, are not subject to rebate. See also, PLR 8933045 (July 9, 1989). In a similar fashion, under Section 1.148-5(e)(3), administrative costs of purpose investments decrease the receipts from those investments. These amounts thus would also not be subject to rebate.

## IX. RECOVERIES OF REBATE OVERPAYMENT

Under Section 1.148-3(i), issuers are entitled to recover any overpayment of rebate, defined as the excess of (1) the amount paid to the United States under § 148 over (2) the sum of the rebate amounts and yield reduction payments required to be paid on the date the recovery is requested. For recoveries of less than $\$ 5,000$, recovery must wait until the after the final rebate computation date for the issue. To request a recovery, an issuer must file Form 8038 -R with the IRS. An issuer is required to seek a recovery of rebate overpayment within two years of the final computation date (date issue is paid in full) for the issue to which the overpayment relates.

An example in the 2016 Final Regulations makes it clear that the "amount paid" means just the amount paid at that time, and not the future value of that payment on the computation date. See Example 2 in Section 1.148-3(j).

The IRS has concluded that an arbitrage rebate overpayment is a "sum" within the meaning of § 7422(a), which requires that administrative remedies be exhausted before a suit for recovery of a tax or penalty can be brought in court. See TAM 200750018. The IRS has not yet decided

[^43]whether the future valuing of a rebate payment for purposes of computing a rebate overpayment constitutes the payment of statutory interest for purposes of the Code. See PLR 200512019.

## X. EXCLUSION FROM INCOME

Under §148(f)(5), gross income does not include the amount to be rebated. Amounts paid as rebate are not deductible. This provision has no effect with respect to most governmental or 501(c)(3) bond issues. In the case of private activity bond issues, the investments of gross proceeds giving rise to rebate may be property of a taxpayer. Rebate is often not computed except with respect to five-year installment computation periods. Borrowers of tax-exempt proceeds may need to know the rebate amount applicable to each tax year in order to exclude such earnings.


[^0]:    1 This outline has been developed as a project of the faculties of the 1991 through 2023 NABL The Workshop conference, Bond Attorneys' Workshops and Tax and Arbitrage Seminars. Grateful acknowledgement is made for the contributions of prior workshop chairs and panelists.

    2 Part I discusses arbitrage principles; Part II discusses the rebate provisions of § 148(f) and Section 1.148-3. For ease of reference and understanding in context, certain concepts are discussed in both Parts I and II. Matters discussed in this outline relating to tax-exempt bonds generally also apply to qualified tax credit bonds and bonds providing for direct subsidy payments, as described in §§ 54A and 6431, each as in effect prior to Pub. L. No. 115-97, enacted December 22, 2017, sometimes referred to as the "Tax Cuts and Jobs Act." This outline presents an evolution of the provisions of the Internal Revenue Code and the Treasury Regulations governing arbitrage and rebate, including the exceptions to rebate. Prior versions of this outline provide greater detail with regard to earlier versions of the current Treasury Regulations.

    3 The arbitrage restrictions also apply to certain tax credit and direct pay tax advantaged bonds.

[^1]:    4 The chronology of the arbitrage regulations is discussed in greater length in versions of this outline from prior Workshops.

    581 Fed. Reg. 46582 (July 18, 2016).
    681 Fed. Reg. 88999 (December 9, 2016).

[^2]:    7 Section 1.148-1(b). Pre-issuance accrued interest is interest (i) that accrues for a period of not more than one year and (ii) is paid within one year after the issue date.

    8 Section 1.148-1(b).

[^3]:    9 Proceeds of an issue include only sale proceeds, investment proceeds and transferred proceeds, not replacement proceeds. For certain private use purposes, disposition proceeds (i.e., any amounts (including property, such as an agreement to provide services) derived from the sale, exchange, or other disposition of property (other than investments) financed with the proceeds of an issue) are treated as proceeds (see Section 1.141-12(e)).

    10 Section 1.148-9(b)(1).
    11 Section 1.148-9(b)(2).
    12 In addition, transferred proceeds may be limited under the universal cap rules of Section 1.148-6(b)(2).

[^4]:    13 E.g., see Section 1.103-13(g) of the 1979 Regulations and City of Tucson v. Commissioner, 820 F.2d. 1283 (D.C. Cir., 1987). For more discussion of the history of the "sinking fund" concept, see versions of this outline from prior Workshops.

    14 Rev. Rul. 78-302.
    15 Rev. Rul. 82-101.

[^5]:    16 Section 1.148-1(c)(3).
    17 See PLR 8334103, revoked by PLR 8841027.

[^6]:    18 TAM 201118012 (Jan. 19, 2011).
    19 See the anti-abuse rules under Section 1.148-10. See also PLRs 9424043 and 200306004, Notice 200149, and, more importantly, Rev. Proc. 2002-31.

[^7]:    20 Although the Regulations describe the amounts as being gross proceeds for purposes of § 148, for certain types of remedial actions, such as alternative use of disposition proceeds, the disposition proceeds are treated as "proceeds" for purposes of $\S 141$ and the Regulations further describe modifications to temporary periods and effect of receipt of disposition proceeds on arbitrage compliance and rebate exceptions, therefore, for such purposes, the disposition proceeds are treated as "proceeds."

[^8]:    ${ }^{21} 10 \%$ of issue price minus pre-issuance accrued interest if the bonds have more than a de minimis amount of original issue discount or premium.

    22 While the Code section refers to "proceeds," the Regulations more specifically apply the restriction to sale proceeds.

    23 The IRS has taken an expansive view of the meaning of a reserve fund. For example, a project fund could be determined to be a reserve fund if the issuer did not have adequate expectations of rapid expenditure.
    ${ }^{24}$ Such other amounts may be subject to yield restrictions and eligible for "yield reduction payments" under Section 1.148-5(c).

    25 Under Rev. Proc. 84-26, the IRS suggests that a 4R Fund is also not ordinarily reasonably required if it secures general obligation bonds unless there are rare or unusual circumstances which would require such a fund.
    ${ }^{26}$ Such amounts, however, may be eligible for "yield reduction payments" under Section 1.148-5(c), discussed below in Part I, Section IV.B.7. Such amounts may also be eligible for the Minor Portion exception discussed in Section IV.G below.

[^9]:    27 This last category is really not an arbitrage provision in the traditional sense. It is simply a prohibition on the use of tax-exempt bonds to fund public housing outside the jurisdiction of the issuer.

    28 Section 1.148-1(e); see also Section 148(b)(4) (providing a separate safe harbor for certain prepayments for natural gas).

    2984 Fed. Reg. 14006 (April 9, 2019).
    30 Section 1.148-1(e)(4).
    31 Id. Section 1.148-4(h)(2)(ii).
    32 Sections 148(b)(3)(A) and 148(b)(3)(B).
    33 This exception does not apply to Time Deposit Series SLGS (with maturities from 15 days to 40 years).
    34 Section 1.150-1.

[^10]:    41 See Section 1.150-1(c)(3)(ii); Section 1.148-9(h)(1)(i). There is an exception that applies when different portions of a multi-purpose issue are related to different tax-exempt purpose investments.

    42 Program investments (defined under Section 1.148-1(b)) are investments acquired to carry out the governmental purposes of the issue pursuant to a loan program for the public, governmental units, 501(c)(3) organizations, or housing facilities.

    43 The materially higher spread is $1.125 \%$ for qualified mortgage loans under $\S 143(\mathrm{~g})$ and $2.0 \%$ for student loans pursuant to Section 1.148-2(d)(2).

    44 This provision has little effect with respect to yield restriction but is extremely important with respect to rebate.

    45 See Section 1.148-2(d)(1).

[^11]:    46 47

[^12]:    48 In general, the actual issuer of a bond issue is treated as the obligor of such issue. However, with respect to refundings of a "conduit financing," the "conduit borrower" is treated as the issuer.

    49 Section 1.150-1(d)(3); see also Section 149(d)(5) (as in effect prior to the Tax Cuts and Jobs Act) ("a bond shall be treated as issued to advance refund another bond if it is issued more than 90 days before the redemption of the refunded bond.")

    50 Sections 1.148-9(d)(ii).
    51 Sections 1.148-9(d)(iii).
    52 Section 1.148-2(e)(3).
    53 Section 1.148-2(e)(4).

[^13]:    54 Pub. L. 96-499.
    55 See Harbor Bancorp v. Commissioner, 105 T.C. 260 (1995), aff'd, 115 F.3d 722 (9 ${ }^{\text {th }}$ Cir. 1997), cert. den. 118 S. Ct. 1035 (1998) (bonds issued by housing authority were deemed issued after December 31, 1985 and subject to the rebate requirement). Note that the regulations provide for intermediate sanctions (short of loss of taxexemption) for late rebate payments.

    56 Section 1.148-5(e)(1).

[^14]:    57 United States Treasury obligations purchased directly from the United States Treasury generally refers to U.S. Treasury Certificates of Indebtedness, Notes and Bonds of the State and Local Government Series ( "SLGS"). While it is technically possible to purchase open market Treasuries directly from the United States Treasury in a Treasury auction, such purchases are generally not practical for gross proceeds of tax-exempt bonds.

    58 A lead underwriter in a negotiated underwriting transaction is deemed to have a material financial interest in the issue until 15 days after the issue date of the issue.

[^15]:    59 Any payment received directly or indirectly by the issuer from a provider at the time a guaranteed investment contract is purchased (e.g., an escrow float contract) is taken into account in determining the lowest cost bid.

    60 Securities issued by the United States Treasury pursuant to the State and Local Government Series program described in 31 CFR part 344.

[^16]:    61 Rev. Proc. 2022-38.
    62 An investor means each depositor, or each different source of funds deposited. For example, bond proceeds and issuer tax revenues would be considered separate investors.

[^17]:    63 The "universal cap" rule provides an overall limitation on the amount of gross proceeds allocable to an issue. See Section 1.148-6(b)(2).

    64 See Section 1.148-4(e) for the determination of "value."
    65 See TAM 9749002 (Aug. 11, 1997).

[^18]:    66 A current outlay of cash is one reasonably expected to occur not later than five banking days after the proceeds are allocated to the expenditure. Section 1.148-6(d)(1)(ii).

    67 Section 1.150-1(b).
    68 Section 1.150-2(d). A special rule applies to certain preliminary expenditures such as architectural, engineering, surveying, soil testing and bond issuance costs.

    69 Defined in Section 1.148-6(d)(3)(ii)(B).
    70 Defined under Section 1.148-6(d)(4); Section 1.150-2(d)(3) also includes certain types of loans.
    71 Section 1.150-2(d)(2) includes a rule extending the 18-month limit to 3 years for small issuers (and relieving them of the 3 -year limit) and to 5 years for long-term construction projects upon a certification similar to that for a 5-year temporary period.

[^19]:    72 Section 1.148-6(d)(3)(iii)(A).
    Section 1.148-6(d)(3)(iii)(B).
    Section 1.148-1(c)(4)(ii). Note that there is no reason to believe that the first day of the fiscal year will be a date on which even a very needy issuer would experience a deficit. Most issuers experience cyclical cash flow balances that are expected to be in excess of a reasonable working capital reserve on certain days in every fiscal year.

[^20]:    80106 T.C. 325 (May 14, 1996), supplemented by T.C. Memo. 1996-343 (1996), vacated and remanded 97-1 U.S.T.C. $\mathbb{1}$ 50,424 (1997).

[^21]:    81 Sections 1.148-3(a) through (c) provide the general rules for determining the rebate amount.
    82 Section 1.148-3(f).
    83 Section 1.148-3(e)(2).
    84 Section 1.148-3(h)(3). Rev. Proc. 2005-40 also provides procedures for corrections of a failure to timely pay the proper amount of arbitrage rebate.

[^22]:    Section 1.148-3(h)(2).
    Section 1.148-3(e)(2).
    Sections 1.148-3(e)(1) and (2).
    Section 1.148-3(e)(1).
    Section 1.148-1(b).

[^23]:    Section 1.148-1(b).
    Section 1.148-3(d)(2).
    Sections 148(f)(4)(A) and 1.148-3(d)(2)(i).
    Allocation of investments to gross proceeds is addressed under the Regulations in Sections 1.148-6(b), (c), and (e).

    Section 1.148-3(d)(2)(iii).

[^24]:    95 De minimis discount or premium means an amount that does not exceed the sum of $2 \%$ times the stated redemption price at maturity. Section 1.148-1(b).

    96 A bond, debenture, note or certificate of indebtedness under § 1275.
    97 Under Section 1.148-5(b)(2), all yield restricted investments of the same class are treated as a single investment, and investments held in a refunding escrow (no matter how funded) are treated as a single investment.

    98 Section 1.148-5(d)(2).
    99 Section 1.148-5(d)(3)(i).
    100 Section 1.148-5(d)(3)(ii).
    101 Section 1.148-3(d)(1)(i).
    102 However, qualified administrative costs may act to decrease the yield and rebate amount due with respect to a nonpurpose investment. See Section 1.148-6(c) and the discussion at Part I, Section IV.D. above.

[^25]:    103 Rev. Proc. 2022-38.
    104 Section 1.148-5(c)(2).
    105 Section 1.148-3(c).

[^26]:    ${ }^{106}$ Section 1.148-1(b). A variable yield issue will automatically be treated as a fixed yield issue as of the first day on which it would qualify as a fixed yield issue if newly issued on such conversion date (or the next computation date at the option of the issuer). Section 1.148-4(d).

    107 See Section 1.150-1(b).
    108 Section 1.148-1(f)(4)(i).

[^27]:    109 In this context, a "maturity" refers to bonds with the same payment and credit terms. If some bonds have different coupons but the same maturity date, those are considered separate maturities for this rule. Insured bonds would be separate maturities from uninsured bonds or bonds with a different insurer.

    110 Section 1.148-4(b)(1).

[^28]:    111 This rule was written to force valuation of heavily discounted term bonds at the lower, accreted value, not par value, under the theory that, if the bonds are trading on the market at a significant discount, the issuer could simply purchase them at the market price and then cancel them.

    112 Section 1.148-4(b)(3)(i).
    113 Section 1.148-4(b)(3).
    114 Even under the 2016 Final Regulations, certain analysis or testing may be required to determine the lowest yield-to-call date in circumstances in which the bonds are callable at declining premiums.

[^29]:    115 Section 1.148-4(h)(4)(iii).
    116 Section 1.148-4(b)(4) and (h)(4)(ii).
    117 Section 1.148-1(b).
    118 Section 1.148-4(c).

[^30]:    119 Section 1.148-4(c)(2).
    Section 1.148-(f)(6).
    121 Section 1.141-1(b).
    122 Section 1.148-4(e)(1).
    123 Section 1.148-4(e)(2).
    124 Section 1.148-4(e)(2).

[^31]:    125 Section 1.148-4(d).
    126 Section 1.148-4(f).
    127 Section 1.148-4(f)(3).
    128 Section 1.148-4(f)(4)(i).
    129 Present value for this purpose is computed using the yield of the issue (determined with regard to guarantee payments) as the discount rate.

[^32]:    130 Section 1.148-4(f)(4)(ii). Payments by a borrower for a credit enhancer's attorneys are qualified guarantee fees because such attorneys' fees are "other costs relating to the transfer of credit risk" within the meaning of Section 1.148-f(4)(ii). PLR 200813022.

    131 Section 1.148-4(f)(4)(ii).
    132 Section 1.148-4(f)(5).
    133 Section 1.148-1(b).
    134 Section 1.148-4(f)(5).
    135 Section 1.148-4(f)(6)
    136 Section 1.148-4(f)(7).

[^33]:    137 If the contract modifies the issuer's risk of interest rate changes with respect to a bond that is part of an issue that, absent the contract, would be a fixed rate issue, the contract must generally be entered into no later than 15 days after the issue date (or the deemed issue date) of the issue. Section 1.148-4(h)(2)(i)(B).

    138 See Section 1.148-4(h)(2)(v).

[^34]:    140 Sections 1.148-7(b), 1.148-7(c)(1), and 1.148-7(a)(3).
    141 Section 1.148-7(c)(3). A grant is defined in Section 1.148-6(d)(4).
    142 Section 148(f)(4)(B)(ii)(I). Also, the additional six-month exception cannot be used for TRANs.

[^35]:    ${ }^{143}$ This legislative history is found in a colloquy between senators Moynahan and Packwood (Congressional Record, Senate September 27, 1986 at 13960 and a soliloquy of Congressman Rostenkowski, Congressional Record, Extension of Remarks (October 2, 1986) at E. 3391.

    144 Although the statutory safe harbor references available amount as excluding proceeds of the issue, Section 1.148-6(d)(3)(iii)(D) provides that the definition of available amount under Section 1.148-6(d)(3)(iii)(A) applies, and generally excluded from available amount is proceeds of any issue.
    ${ }^{145}$ To distinguish this definition of deficit from the one used for other working capital expenditure purposes (taking into account a reasonable working capital reserve), this is often referred to as the "Safe Harbor Cumulative Cash Flow Deficit."

[^36]:    ${ }^{146}$ See PLR 8740027 (delinquent TRANs).
    ${ }^{147}$ By definition, TRAN proceeds are not used for public school construction and hence TRANs are not eligible for the $\$ 15,000,000$ limit.

    148 See TAM 200413012 for additional guidance on how this 5\% limit may be computed.

[^37]:    149 The safe harbors provided by § 142(b)(1)(b), as augmented by § 146(h)(2) in the case of solid waste disposal facilities, may be applied to determine the ownership of bond-financed property. Section 148(f)(4)(C)(iv); Section 1.148-7(f)(3)(ii).
    ${ }^{150}$ Section $1.148-7(\mathrm{f})(1)(\mathrm{i})$ clarify the "to be used" language of the Code by providing that an issue will be a construction issue if, as of the issue date, the issuer reasonably expects that at least $75 \%$ of the ACP will be allocated to construction expenditures.

[^38]:    151 See Part I, Section V.A above for the definition of capital expenditures.
    152 See Section 1.150-1(b) for the applicable definition of "issuance costs."
    153 ACP do not include amounts received as payments on purpose investments, earnings on those amounts, or repayments of grants financed by the issue. Section 148(f)(4)(C)(vi); Section 1.148-7(i).

[^39]:    154 See Sections 1.148-7(m) and 1.148-3(h)(4). In addition, § 148(f)(4)(C)(x) and the Regulations provide that failure to pay all or a portion of a penalty (not due to willful neglect) may be cured, with the consent of the Secretary of the Treasury, by payment of the deficiency, plus $50 \%$ of the deficiency, plus interest on the deficiency from the due date to the payment date at the § 6621 underpayment rate. This provision is analogous to § 148(f)(7), which pertains to failure to make required rebate payments. See also PLR 9405018 (safe harbor for late payments of rebate for an innocent failure to pay rebate applies to a failure to pay the in lieu of rebate penalty).

[^40]:    155 Section 1.148-8(c)(2)(ii). See Section 1.150-1(e) for control factors.

[^41]:    ${ }^{156}$ Section 148(f)(4)(D)(vii), added by section 223(a) of the 1997 Act.
    157 Pub. L. 107-16, section 421(a).
    158 Section 901 of the 2001 Act.
    159 Pub. L. 111-312, section 101.
    160 Pub. L. 112-240, section 101.
    161 Only bond issues subject to the rebate requirement (such as tax-exempt issues or direct pay or tax credit bond issues) are included. Advance refunding bonds can no longer be tax advantaged, and therefore this inclusion of advance refunding bonds is no longer applicable.

[^42]:    162 Section 148(f)(4)(A)(ii).
    ${ }^{163}$ Section 1.148-3(k).

[^43]:    ${ }^{164}$ Section 1.148-1(c)(4)(ii)(E).
    165 Perhaps confusingly, the regulatory definition of "investment" includes tax-exempt bonds. Thus, a taxexempt bond may be an investment but not a purpose investment and not a non-purpose investment.

    166 Id.

