**The Case for “Reverse Depreciation” of Reclamation Costs**

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**PRÉCIS**

Dans certains secteurs d’activité, comme les mines et l’élimination des déchets, les contribuables sont tenus par la loi de réhabiliter les terrains ou autres biens endommagés ou contaminés dans le cadre de leurs activités commerciales. La réhabilitation a habituellement lieu une fois que le site est fermé et que le contribuable n’y exploite plus d’entreprise. Cet article porte sur le traitement fiscal de ces obligations de réhabilitation, en particulier le traitement des montants mis de côté ou investis pour financer le paiement des frais engagés à cette fin. Par exemple, les contribuables seront souvent tenus de fournir des garanties financières à l’égard de leurs obligations de réhabilitation sous la forme d’un cautionnement, d’une somme d’argent, de lettre de crédit ou d’apport à une fiducie créée à cette fin.

En *common law*, les frais de réhabilitation sont constatés aux fins de l’impôt sur le revenu dans l’année d’imposition au cours de laquelle ils sont engagés, ce qui correspond normalement à l’année au cours de laquelle la réhabilitation est effectuée. Les contribuables appartenant aux secteurs d’activité visés estiment que les frais de réhabilitation devraient être constatés, aux fins de l’impôt sur le revenu, dans les années d’imposition précédant la réhabilitation, une fois que celle-ci a été exigée (même si elle sera effectuée dans le futur). En réponse à ces préoccupations, le gouvernement fédéral a adopté des règles législatives qui permettent la déduction des apports à une fiducie environnementale destinée à financer les frais de réhabilitation futurs. En termes généraux, ce régime prévoit que l’apport d’un contribuable à la fiducie est déductible dans l’année où il est effectué et la fiducie est imposée annuellement sur le revenu de placement gagné sur l’apport. Le montant de l’apport retiré et le revenu de placement sont inclus dans le revenu du contribuable au moment du retrait, et ces montants sont déductibles en vertu des principes généraux puisqu’ils sont destinés à la réhabilitation. Il est intéressant de noter que même si les règles législatives permettent une déduction plus rapide des frais de réhabilitation que ce qui est prévu en *common law*, sur une base après impôt et compte tenu de la valeur temporelle de l’argent, l’obligation pour un contribuable de payer des frais de réclamation sera généralement identique et ce, peu importe qu’elle soit régie par le régime de la loi ou les règles de la *common law*. Autrement dit, en termes économiques, il n’y a guère de changement par rapport à la *common law*.

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Dans cet article, l’auteur fait valoir que les frais de réhabilitation qui reflètent une valeur de récupération négative (c’est-à-dire, que la réhabilitation n’ajoute pas de valeur significative qui peut se matérialiser ou être consommée après la réhabilitation) devraient être assujettis à un « amortissement inversé ». Selon cette approche, les frais de réhabilitation seraient déduits ou amortis avant la date de la réhabilitation, pendant la période où le contribuable gagne un revenu, pour coïncider avec la diminution de richesse qui découle de l’obligation de payer les frais en question. Les montants investis pour financer la réhabilitation future seraient déductibles dans l’exercice et des intérêts théoriques sur ces montants seraient déductibles jusqu’à la date de réhabilitation. La déduction des intérêts théoriques servirait à neutraliser l’inclusion du revenu gagné par le contribuable en investissant ces montants. (Par ailleurs, le revenu serait simplement exonéré de l’impôt.) Aussi, comparativement au régime de la common law et aux règles législatives, l’amortissement inversé permettrait d’exonérer de l’impôt le revenu gagné aux fins de financement de la réhabilitation. Cette méthode serait semblable en quelque sorte à une méthode fondée sur un régime enregistré d’épargne-retraite à des fins environnementales.

Dans le cas des frais de réhabilitation qui génèrent une valeur de récupération positive, la common law et le régime législatif seront souvent appropriés. Cependant, même dans les cas où la valeur de récupération est positive, on fait valoir que l’amortissement inversé serait plus approprié si le site réhabilité perdait de la valeur pendant la période où le contribuable gagne un revenu mais ne faisait pas l’objet d’une déduction pour amortissement durant cette période. Dans ces circonstances, l’amortissement inversé des frais de réhabilitation pourrait servir de mesure corrective, destinée à compenser la perte d’une déduction régulière au titre de l’amortissement dans les années où le site perd effectivement de la valeur à cause des activités de contamination du contribuable. Par exemple, dans la mesure où la réhabilitation est effectuée sur un terrain (et qu’un amortissement régulier n’est pas disponible), l’amortissement inversé des frais de réhabilitation pourrait être justifié même si la réhabilitation donne lieu à une valeur de récupération positive.

**ABSTRACT**

Taxpayers in certain industries, such as mining and waste disposal, are legally obligated to reclaim land or other property that is damaged or contaminated in the course of their business activities. The reclamation typically occurs after the underlying site has closed and the taxpayer is no longer carrying on business on the site. This article discusses the income tax treatment of these reclamation obligations, and in particular, the treatment of amounts set aside or invested for the purpose of funding the payment of reclamation costs. For example, taxpayers will often be required to provide financial assurance in respect of their reclamation obligations, which can include the posting of bonds, cash, letters of credit, or contributions to a reclamation trust.

Under common law principles, reclamation costs are recognized for income tax purposes in the taxation year in which they are incurred, which normally means the year in which the reclamation is carried out. Taxpayers in the affected industries have argued that reclamation costs should be recognized for income tax purposes in taxation years prior to reclamation, once the obligation to reclaim (albeit in the future) has been imposed. In response to the industries’ concerns, the federal government enacted statutory rules to allow a deduction for contributions made to a qualifying environmental trust used to fund future reclamation. In general terms, under this
system, a taxpayer’s contributions to the trust are deductible in the year in which they are made and the trust is taxed annually on the investment income earned on the contributions. Withdrawals of the contributions and the investment income are included in the taxpayer's income upon withdrawal, and such amounts are deductible under general principles as they are spent on reclamation. Interestingly, although the statutory rules allow an earlier deduction on account of reclamation costs relative to the common law position, on an after-tax basis and after accounting for the time value of money, a taxpayer’s liability to pay reclamation costs will generally be the same whether it is governed by the statutory system or by the common law rules. In other words, in economic terms, little has changed from the common law position.

In this article, the author argues that reclamation costs that reflect negative salvage value (that is, where the reclamation does not add significant value that can be realized or consumed after the reclamation) should be subject to a “reverse depreciation approach.” Under the reverse depreciation approach, reclamation costs would be deducted or depreciated before the time of reclamation, during the taxpayer’s income-earning process, to coincide with the taxpayer’s loss in wealth represented by its liability to pay the costs. Under this approach, amounts invested to fund the future reclamation would be deductible on a current basis, and imputed interest expense thereon would be deductible up to the time of reclamation. The imputed interest expense deduction would serve to offset the inclusion of the income earned by investing such amounts. (Alternatively, the income could simply be exempt from taxation.) Thus, in contrast to the common law and statutory rules, the reverse depreciation approach would exempt from taxation the income earned for the purpose of funding the reclamation. The reverse depreciation approach would be analogous to an “environmental registered retirement savings plan” approach.

In the case of reclamation costs that generate positive salvage value, the common law and statutory system will often be appropriate. However, even in the positive salvage value cases, it is argued that reverse depreciation may be more appropriate if the reclaimed site depreciated in value during the taxpayer’s income-earning process but was not subject to a depreciation deduction during that period of time. Under these circumstances, the reverse depreciation of the reclamation costs could act as a remedial measure, meant to compensate for the lack of a regular depreciation deduction in the years in which the site actually depreciated in value owing to the taxpayer’s contaminating business activities. For example, to the extent that the reclamation is performed on land (where regular depreciation is not available), reverse depreciation of the reclamation costs could be justified even if the reclamation generates positive salvage value.

KEYWORDS: ENVIRONMENT • COSTS • COST RECOVERY • DEPRECIATION • MINING

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BACKGROUND AND SUMMARY OF ARTICLE

This article discusses the income tax treatment of reclamation obligations. More specifically, it discusses the appropriate income tax treatment of investments made for the purpose of satisfying the payment of future reclamation costs. Taxpayers making these types of investments include firms that are legally obligated to reclaim property upon or after the cessation of their business operations. For example, as a condition of carrying on their current business operations, mine operators, lumber companies, and firms that operate waste disposal sites typically have reclamation obligations imposed on them by law.1 Mine operators may be required to remove buildings, utilities, and mining equipment, seal openings in mine pits, recontour excavations and soil spills, and revegetate or otherwise restore mine waste dumps.2 Lumber companies may be required to carry out a silviculture plan and reforest the land that they use to harvest trees.3 Operators of waste landfill sites may be required to monitor water and gas migration and the settlement or erosion of the landfill, maintain a proper drainage system, and generally preserve the surrounding land in an

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1 For example, see part VII of the Mining Act (Ontario), RSO 1990, c. M.14, as amended, and the regulations thereunder; and part IV of Ontario Regulation 232/98, as amended (Landfilling Sites) made under the Environmental Protection Act (Ontario), RSO 1990, c. E.19, as amended. This article deals only with reclamation obligations that are imposed on taxpayers as a consequence of their normal business operations (for example, the mining, waste disposal, and nuclear power business operations discussed in the text). The discussion does not apply to other environmental obligations such as tort liabilities or penalties arising from negligent or accidental acts or omissions.


3 For example, this obligation was imposed on the taxpayer in Northwood Pulp and Timber Limited v. The Queen, 96 DTC 1104 (TCC); aff’d. 98 DTC 6640 (FCA).
orderly and environmentally sound manner. These taxpayers will often be required to provide financial assurance in respect of their reclamation obligations, which can include the posting of bonds, cash, letters of credit, or contributions to a reclamation trust. Reclamation obligations may also be imposed on operators of nuclear power plants and offshore oil wells and platforms. For example, an operator of a nuclear power plant may be required to decommission the plant and nuclear equipment and the surrounding area upon the closure of the plant, and the operator of an oil well may be required to dismantle and remove the well, platform, and accompanying fixtures. (Unless otherwise noted, the reclamation activities discussed in this article are only those that occur upon or after the closure of the underlying site or the cessation of the related business activity.)

The first part of the article considers, from a theoretical perspective, the appropriate income tax treatment of an amount invested currently for the purpose of funding the payment of reclamation costs in the future (“the funding amount”). The discussion focuses on whether the funding amount should be deductible in the year in which it is invested (“the funding year”), or whether the deduction should be deferred to the year in which the reclamation activities are carried on (“the reclamation year”). This determination, in turn, affects the significant issue of whether the income earned by investing the funding amount (“the reclamation income”) should be subject to or exempt from taxation.

Although the income tax treatment of reclamation costs has been highly topical in recent years, the Canadian literature, excellent in its coverage of the legal issues, has provided little theoretical analysis in terms of the appropriate recognition of funding amounts and reclamation income. Most of the relevant analysis in this

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4 These obligations were imposed on the taxpayer in *I.B. Pedersen Limited v. The Queen*, 94 DTC 1085 (TCC); similar obligations were imposed on the taxpayer in *Dep. Min. Rev. (Que.) v. La Compagnie Meloche Inc.*, 2002 DTC 7169 (Que. CA).

5 For example, see section 145(1) of the Mining Act (Ontario), supra note 1.


8 The analysis in this article focuses on the proper measurement of income and loss and does not take into account other factors that may justify the preferential tax treatment (or not) of reclamation costs. Thus, for example, no opinion is given on the possibility of providing preferential treatment for the purpose of encouraging the reclamation of environmentally damaged property. In any event, the types of reclamation obligations discussed herein are normally required by law, so that further “encouragement” in this regard is arguably unnecessary.

regard has been provided by American commentators, who have advanced two general approaches for dealing with reclamation obligations. 10 Under the first approach, reclamation income would be fully exempt from taxation. Under the second approach, reclamation income would be fully subject to taxation.

According to proponents of the first approach, referred to as “the reverse depreciation approach,” a taxpayer’s reclamation costs should be deducted or depreciated before and up to the time of reclamation so as to correspond with the taxpayer’s decrease in wealth resulting from its obligation to pay the costs. 11 Under this view, reverse depreciation is similar to depreciation that applies to regular capital costs, except that it relates to costs expended at the end of the income-earning process rather than at the beginning of the process; reclamation costs are considered “reverse” capital costs. 12 Under the reverse depreciation approach, the taxpayer

10 The relevant articles are listed in notes 11 and 13, infra. It should be noted that much of the literature dealing with the income tax treatment of reclamation costs is not particularly relevant for the purposes of this discussion. Most of the articles deal with the characterization of reclamation costs as either current or capital costs, and therefore deal only with the issue of whether reclamation costs should be deducted or capitalized in the reclamation year. In other words, little or no consideration is given in these articles to the recognition of funding amounts or reclamation income before the reclamation year. Some of the better-known American articles on the current/capital distinction include Thomas H. Yancey, “Emerging Doctrines in the Tax Treatment of Environmental Cleanup Costs” (1992) vol. 70, no. 12 Taxes: The Tax Magazine 948-73; Jeffrey M. Gaba, “Tax Deduction of Hazardous Waste Cleanup Costs: Harmonizing Federal Tax and Environmental Policies” (1996) vol. 20, no. 1 Harvard Environmental Law Review 61-110; Sheldon D. Pollack, “Tax Treatment of Environmental Transactions” (1998) vol. 52, no. 1 The Tax Lawyer 81-132; Calvin H. Johnson, “Capitalization After the Government’s Big Win in INDOPCO” (1994) vol. 63, no. 10 Tax Notes 1323-41; and John W. Lee, “Deconstructing the General Plan of Rehabilitation Doctrine” (2002) vol. 97, no. 6 Tax Notes 803-26. The Canadian articles are listed in note 9, supra.

11 The first approach is favoured by Sunley, supra note 6; Donald W. Kiefer, “The Tax Treatment of a ‘Reverse Investment’” (1985) vol. 26, no. 9 Tax Notes 925-32; William A. Klein, “Tax Accounting for Future Obligations: Basic Principles” (1987) vol. 36, no. 6 Tax Notes 623-34; and Butler, supra note 7, especially at 162-65. In the Canadian literature, both Carr, supra note 9, and Carson, supra note 9, appear to favour this approach, although they do not attempt to rationalize the approach from a theoretical perspective.

12 The “reverse” nature of reclamation costs is best illustrated in the articles by Kiefer, supra note 11, and Sunley, supra note 6. These two articles summarize the testimony given by Kiefer, Sunley, and Gerard M. Brannon, “Timing and Measurement of Taxpayer Deductions for Obligations To
would deduct each funding amount in the corresponding funding year. Furthermore, the taxpayer would deduct imputed interest expense computed on each funding amount up to the time of reclamation to account for the passage-of-time increase in the present value of the reclamation costs. The foregoing treatment would effectively result in the depreciation of the taxpayer’s reclamation costs starting with the funding year and ending with the reclamation year. Assuming that the taxpayer’s rate of return (in the form of the reclamation income) equaled the rate of imputed interest expense, this approach would effectively allow the reclamation income to grow free of tax. (Alternatively, instead of allowing the deduction on account of imputed interest expense, the reclamation income could simply be exempt from taxation.) Interestingly, a similar approach has been adopted for financial accounting purposes, although the second approach described below (or its economic equivalent) generally applies for income tax purposes.

Under the second approach, referred to as “the deferral approach,” a taxpayer would not be allowed to deduct each funding amount in the funding year and there would be no imputed interest expense deduction. Instead, the taxpayer would be fully subject to taxation on the reclamation income, and the recognition of the reclamation costs would be deferred entirely to the reclamation year. According to proponents of this approach, a funding amount should be treated in the same manner as any other investment that is made for the purpose of funding an obligation to pay an amount in the future. In particular, it is argued that the reclamation income earned by investing the funding amount should be subject to taxation in some manner, and the taxpayer making the investment is the only practical person to tax.

The second part of the article discusses the income tax treatment of reclamation costs under the Canadian income tax system. The courts have consistently held that reclamation costs are recognized in the year in which they are incurred, which normally means the reclamation year. In other words, the common law treatment

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of reclamation costs generally follows the deferral approach described above. In response to industry concerns over this treatment, the government enacted a statutory scheme to allow a current deduction for contributions made to a qualifying environmental trust (QET) used to fund future reclamation activities. In general terms, under this system, a taxpayer’s contributions to a QET (essentially, funding amounts) are deductible in the year in which they are made and the trust is taxed annually on the investment income earned on the contributions (essentially, the reclamation income). Withdrawals of the contributions and the investment income are included in the taxpayer’s income upon withdrawal, and such amounts are deductible under general principles as they are spent on the reclamation activities. Interestingly, on an after-tax basis and after accounting for the time value of money, a taxpayer’s liability to pay future reclamation costs will generally be the same whether it is funded by way of a deductible contribution to a QET or by way of an investment made outside a QET. In other words, in economic terms, nothing has really changed from the common law position; the statutory treatment is the after-tax economic equivalent of the deferral approach. Not surprisingly, the affected industries, particularly the mining industry, have argued that the statutory rules do not go far enough to accommodate their concerns.14 These industries have generally argued in favour of an “environmental registered retirement savings plan [RRSP] approach,”15 which would parallel the reverse depreciation approach described above.

The second part of the article goes on to review recent developments in the case law that may support a more favourable tax regime for reclamation costs—that is, a treatment that is more favourable than the deferral approach and the QET statutory regime. For example, on the basis of recent jurisprudence, one could argue that a taxpayer could begin to take deductions on account of reclamation costs once the obligation to reclaim (albeit in the future) was imposed on the taxpayer. Furthermore, it appears that under certain circumstances taxpayers may utilize the paragraph 20(1)(m) reserve mechanism under the Income Tax Act16 to defer the inclusion of current income (that earned during prereclamation income-earning operations) to the reclamation year. This latter treatment would effectively allow taxpayers to match the inclusion of the current income to the deduction of the reclamation costs in the reclamation year.

In this article, it is concluded that the appropriate income tax treatment of a taxpayer’s reclamation obligation should be determined by reference to the benefits, if any, that are generated as a result of the reclamation. If the reclamation does not generate significant future benefits to the taxpayer in the reclamation year or in subsequent years—that is, the reclamation costs generally reflect negative salvage value—the reverse depreciation approach will provide a more accurate portrayal of

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14 Carr, supra note 9, at 7.
15 Ibid.
16 RSC 1985, c. 1 (5th Supp.), as amended (herein referred to as “the Act”).
the taxpayer’s income position. In contrast, if the reclamation generates significant benefits to the taxpayer in the reclamation year or in subsequent years—that is, the reclamation costs generate positive salvage value—the deferral approach will generally provide a more accurate portrayal of the taxpayer’s income position. Therefore, whether the current statutory system (or the common law regime) overtaxes reclamation income in any particular circumstance depends on the extent to which the reclamation generates negative or positive salvage value, as the case may be. Thus, if the affected firms and industries can demonstrate that a significant portion of their reclamation activities generate negative salvage value, a case can be made for amending the statutory rules to allow reverse depreciation or an environmental RRSP approach. On the other hand, to the extent that reclamation activities generate positive salvage value, the current system might be justified. However, it is further argued that reverse depreciation could be justified even in the positive salvage value cases, if the underlying (reclaimed) site depreciated in value during the taxpayer’s income-earning years but was not subject to a “regular” depreciation deduction during those years. Under these circumstances, the reverse depreciation approach could be viewed as a remedial measure, meant to compensate for the lack of a regular depreciation deduction in the years in which the site actually depreciated in value owing to the taxpayer’s “contaminating” business activities. For example, to the extent that the reclamation is performed on land (where regular depreciation is not allowed), reverse depreciation could be justified even if the reclamation generates some positive salvage value.

THE INCOME TAX TREATMENT OF RECLAMATION COSTS: THE THEORETICAL FRAMEWORK

Reclamation Costs That Reflect Negative Salvage Value

Reverse Depreciation Approach: Reclamation Income Exempt from Taxation

If a taxpayer invests a funding amount for the purpose of satisfying a reclamation obligation that does not generate positive value in the reclamation year or in subsequent years, the funding amount represents a current loss in the taxpayer’s wealth and it should be deducted in full in the funding year. The funding amount represents a current loss owing to the fact that the reclamation costs (funded with such amount) do not create a commensurate asset in the reclamation year. Stated another way, there is no future asset that serves to offset the taxpayer’s decrease in wealth resulting from the outlay of the funding amount; the future reclamation costs reflect negative salvage value only. For similar reasons, the taxpayer should

17 Sunley, supra note 6, at 720, describes such reclamation costs as follows: “These investments have significant negative salvage value; that is, the costs paid at the end for reclaiming, decommissioning, or dismantling exceeds the value of the salvageable materials.” Similarly, Kiefer, supra note 11, at 928-29, describes reclamation costs as “reverse investments,” in that
be allowed to deduct imputed interest expense between the time of investment and the time of reclamation to account for the increase in the present value of the reclamation costs during that period; such amounts will reflect further decreases in the taxpayer’s wealth. Assuming that the imputed interest expense equalled the taxpayer’s rate of return, such treatment would allow the taxpayer to invest the entire funding amount and to earn tax-exempt reclamation income up to the time of reclamation. As noted earlier, the foregoing approach is referred to as the “reverse depreciation” approach.

The reverse depreciation approach will be illustrated using a number of examples. Unless otherwise noted, for the purposes of the examples and the analysis that follows, the following assumptions apply. It is assumed that the reclamation costs represent negative salvage value only. It is assumed that each funding amount will be generated from the revenues received by the taxpayer in the course of its pre-reclamation business activities. In other words, it is assumed that the funding amount (and therefore the cost of reclamation) is incorporated into the price of the taxpayer’s goods or services charged to its customers in the course of its business.\(^\text{18}\) (Depending on the particular industry in which the taxpayer is involved, a government or other regulatory authority might explicitly authorize the taxpayer to generate the funding amount by way of an additional income charge or fee imposed upon the taxpayer’s customers.)\(^\text{19}\) It is assumed that the taxpayer will immediately invest the funding amount in the funding year, although the analysis herein is applicable even if the funding amount is not so invested.\(^\text{20}\) Last, it is assumed that 10 percent per annum is the taxpayer’s rate of return and the appropriate discount rate, and that the taxpayer is in a 50 percent tax bracket at all times.

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\(^{18}\) Stated another way, in determining its required and actual rate of return in respect of its business or investment, the taxpayer will factor in all of its costs, including its reclamation costs.

\(^{19}\) For example, in the Meloche case, supra note 4, the Quebec Ministry of Environment, pursuant to the Environment Quality Act (Quebec), authorized and set the fees that the taxpayer was entitled to charge its customers for the collection of waste in its waste disposal business. A portion of the fees was set expressly by reference to the taxpayer’s future reclamation obligations.

\(^{20}\) That is, even if the funding amount is not invested, the taxpayer will sustain an immediate loss in wealth equal to the present value of the reclamation costs and further passage-of-time losses in wealth from the time of investment to the time of reclamation. The point is illustrated by Klein, supra note 11, at 625 and 628, and by Sunley, supra note 6, at 720-21.
**Example 1**

A taxpayer carries on a business at the end of year 0, which requires the taxpayer to expend $121 of reclamation costs at the end of year 2. At the end of year 0, the taxpayer charges and receives from its customers a $100 funding amount, which will be used to fund the reclamation. Note that, on a before-tax basis, the taxpayer’s “profit” in respect of the reclamation is nil; that is, the $100 funding amount is exactly offset by the $100 present value of the $121 reclamation costs (using the 10 percent annual discount rate).

Under the reverse depreciation approach, the taxpayer would be allowed to deduct the $100 funding amount in year 0, since it equals the present value of the taxpayer’s $121 reclamation obligation. (The $100 deduction would exactly offset the taxpayer’s inclusion of the $100 funding amount.) As a result, the taxpayer would report nil net income in year 0 in respect of its “investment” made on account of the reclamation obligation. Furthermore, the taxpayer would be allowed to deduct imputed interest expense reflecting the passage-of-time increase in the present value of the reclamation costs. Therefore, in years 1 through 2, the taxpayer would be allowed deductions of imputed interest expense in the amounts of $10 and $11, respectively.\(^2\)\(^1\) Not coincidentally, the taxpayer’s aggregate deductions in years 0 through 2 would equal $121, the amount of the reclamation costs. The foregoing treatment would effectively allow the taxpayer to invest the entire $100 funding amount in year 0 and to earn tax-exempt reclamation income for the purpose of discharging the $121 reclamation payment in year 2; the reclamation income would be exactly offset by the deductions of the imputed interest expense. Note also that the taxpayer’s after-tax “profit” in respect of the reclamation obligation would be nil,\(^2\)\(^2\) the same as the taxpayer’s pre-tax “profit” in respect of the obligation.\(^2\)\(^3\)

The reverse depreciation approach would obviously provide a more beneficial result for the taxpayer relative to the deferral approach, which would simply defer the deduction of the reclamation costs to the reclamation year. In particular, the essential difference between the two approaches is that the former would exempt the reclamation income from taxation, while the latter would fully subject the reclamation income to taxation. For example, if the deferral approach were applied to example 1, the $121 costs would be deducted in year 2 and the taxpayer would

\(^2\)\(^1\) Using a 10 percent annual discount rate, the present value of the costs would increase by $10 (to $110) by the end of year 1 and by a further $11 (to $121) by the end of year 2.

\(^2\)\(^2\) In year 0, the $100 funding amount was received and included in income, although the same amount was spent and deducted in year 0. Therefore, the taxpayer’s net cash flow in year 0 was nil after tax. The investment of the $100 amount would grow tax-free to $121 in year 2, at which point the taxpayer would pay that $121 amount on account of the reclamation. Therefore, the taxpayer’s net cash flow in year 2 would also be nil after tax.

\(^2\)\(^3\) As noted in example 1, the $100 present value of the $121 reclamation costs equals the $100 funding amount, leaving the taxpayer with nil economic profit before tax (since the reclamation costs will provide no further benefit to the taxpayer).
be subject to taxation on the reclamation income earned between year 0 and year 2 to fund such costs. Accordingly, the taxpayer would be required to invest a funding amount of $109.75 in year 0 (the after-tax present value of the $121 costs), rather than $100 (the before-tax present value of the $121 costs) in order to fund the reclamation. Presumably, if it were possible to do so, the taxpayer would increase the funding amount charged to its customers (part of the price of its goods or services) by $9.75.

Proponents of reverse depreciation argue that this approach would most accurately reflect the taxpayer’s income position from the time of investment to the time of reclamation.24 It is noted that reverse depreciation is simply a form of economic depreciation,25 except that it relates to costs incurred at the end of the income-earning process rather than at the beginning of the process. Since economic depreciation—and therefore reverse depreciation—would ensure that a taxpayer’s effective rate of tax in respect of its investments always equalled its nominal rate of tax,26 the reverse depreciation approach would potentially be the most neutral method of accounting for reclamation costs.27 If, instead, the deferral approach were applied to reclamation costs, it would incorrectly raise the price of the taxpayer’s goods or services owing to the taxpayer’s increased tax liability.28 As noted above, if the deferral approach were applied to example 1, the taxpayer would be required to charge a funding amount of $109.75, effectively shifting its additional (and incorrect) tax burden to its customers. If the taxpayer could not increase the funding amount charged to its customers in this manner, the taxpayer’s increased tax burden under the deferral approach would constitute an extra cost of doing business relative to other taxpayers whose costs were recognized property for income tax purposes. Thus, under either scenario (increasing the charged funding amount or not), the deferral approach would likely be non-neutral.

The above analysis was relatively simple, in that the taxpayer’s obligation arose in the same year as the funding year, which, as discussed, is the year in which the taxpayer received the funding amount. Accordingly, the sole benefit generated for

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24 See generally Sunley, supra note 6; and Kiefer, supra note 11.
25 Economic depreciation refers to the annual depreciation of a cost of a capital asset based on its annual changes in value; see Paul A. Samuelson, “Tax Deductibility of Economic Depreciation To Insure Invariant Valuations” (1964) vol. 72, no. 6 Journal of Political Economy 604-6. Economic depreciation is illustrated in appendix 1 to this article.
26 This point was first illustrated by Samuelson, supra note 25.
27 Sunley, supra note 6, at 720-21; and Kiefer, supra note 11, at 928-30. In appendix 1 to this article, an example illustrates the combination of economic depreciation applied to a taxpayer’s “regular” capital investment (made at the beginning of the income-earning process) and reverse depreciation applied to the taxpayer’s reclamation costs (paid at the end of the income-earning process). The combination of the two approaches is shown to result in the taxpayer’s effective rate of tax exactly equaling its nominal rate of tax.
28 Kiefer, supra note 11.
the taxpayer as a result of the reclamation obligation—the receipt of the funding amount that served to “recoup” the taxpayer’s loss in wealth resulting from the obligation to pay the reclamation costs—was received and invested in the same year in which the obligation arose (year 0 in example 1). Therefore, as illustrated above, the taxpayer enjoyed no increase in net worth in year 0 because the present value of the reclamation costs exactly equalled the funding amount. Furthermore, since the taxpayer’s sole benefit was enjoyed in year 0, while the present value of the reclamation costs increased between years 0 and 2, the taxpayer sustained a net loss in wealth over that period of time, which was recognized by way of the deductible imputed interest expense over that period.

The analysis is similar to that just provided if the reclamation obligation arises in a taxation year (“obligation year”) before the funding year. However, in this circumstance, it is not appropriate to allow the taxpayer to claim a deduction in the obligation year, because the present value of the reclamation costs will be offset by the present value of the funding amount that the taxpayer will receive from its customers in the funding year. Similar to the example described above, the deduction on account of the reclamation obligation should be deferred to the funding year, and the imputed interest expense in respect of the funding amount should be computed and recognized beginning with the funding year.

**Example 1A**

Assume the same facts as example 1, except that the taxpayer receives no funding amount in year 0 and instead charges and receives from its customers a $110 funding amount at the end of year 1. In other words, $110 is now the funding amount, and year 1 is now the funding year. Note again that, on a before-tax basis, the taxpayer’s “profit” in respect of the reclamation is nil; that is, the $100 present value of the $110 funding amount is exactly offset by the $100 present value of the $121 reclamation costs (using the 10 percent annual discount rate).

Similar to the taxpayer in example 1, the taxpayer in example 1A sustains a loss in wealth in the obligation year (year 0) equal to the present value of the reclamation costs. However, that loss in wealth is exactly offset by the present value of the $110 funding amount that the taxpayer will receive from its customers in the funding year (year 1). Accordingly, the taxpayer should not be allowed a net deduction in year 0.29 However, by the end of year 1, the funding year, the taxpayer will have sustained a loss of $110 (the present value of the reclamation costs at that time) because such loss will not be offset by any further funding amounts to be received from its customers. Therefore, the taxpayer should be allowed to deduct $110 in year 1; this deduction would exactly offset the taxpayer’s inclusion of the $110 funding amount received

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29 Alternatively, the taxpayer could be allowed to deduct the $100 present value of the costs in year 0 if it also included the $100 present value of the funding amount that it will receive from its customers in year 1. Either way, the taxpayer would have a nil net deduction in year 0.
in year 1. Furthermore, from year 1 to year 2, the present value of the reclamation costs will increase from $110 to $121, so that the taxpayer should be allowed a deduction of $11 on account of imputed interest expense in year 2. In total, the taxpayer should deduct $110 in year 1 and $11 in year 2. Once again, under this approach, the taxpayer’s after-tax “profit” in respect of the reclamation obligation would be nil,30 which is the same as the taxpayer’s before-tax “profit” in respect of the obligation.31

As might be appreciated, if a taxpayer financed its reclamation costs by charging funding amounts to its customers over several taxation years (each such year constituting a funding year), the reverse depreciation approach would allow the taxpayer to deduct each funding amount in the corresponding funding year and to deduct imputed interest expense thereon until the time of reclamation. Consider example 2.

**Example 2**

The taxpayer begins to carry on a business at the end of year 0, which requires the taxpayer to expend reclamation costs at the end of year 5. The reclamation costs will equal $610 (with a present value of $379). The taxpayer charges and receives from its customers funding amounts of $100 at the end of each of years 1 through 5 (also with a present value of $379).32 Similar to the other examples, the taxpayer’s before-tax “profit” in respect of the reclamation is nil; that is, the $379 present value of the five $100 funding amounts exactly equals the $379 present value of the $610 reclamation costs.

Under the reverse depreciation approach, the taxpayer would deduct the $100 funding amounts in each of the respective funding years (years 1 through 5) and imputed interest expense computed on these amounts up to and including year 5. Therefore, in total, the taxpayer would deduct $100, $110, $121, $133, and $146 in years 1 through 5, respectively.33 Again, not coincidentally, the aggregate deductions in years 1 through 5 would equal $610, the amount of the reclamation costs.

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30 In year 1, the $110 funding amount was received and included in income, although the same amount was spent and deducted in year 1. Therefore, the taxpayer’s net cash flow in year 1 was nil after tax. The investment of the $110 funding amount would grow tax-free to $121 in year 2, at which point the taxpayer would pay that $121 amount on account of the reclamation; the taxpayer’s net cash flow in year 2 would also be nil after tax.
31 The $100 present value of the reclamation costs equals the $100 present value of the $110 funding amount, leaving the taxpayer with nil economic profit before tax.
32 Note that, before tax, the $100 amounts invested in years 1 through 5 would grow to $610 in year 5 (at a 10 percent annual rate of return).
33 The taxpayer in example 2 should not be allowed a net loss or deduction in year 0, because the present value of the reclamation costs ($379) exactly equals the present value of the funding amounts that the taxpayer will receive from its customers ($379). However, the taxpayer will sustain losses equal to the $100 funding amount in each respective funding year (years 1 through 5) and further passage-of-time losses in wealth in respect of the reclamation costs up to and including year 5. For example, over the course of year 1, the present value of the five not-yet-received $100 funding amounts will increase by $38 ($9, $8, $8, $7, and $6, respectively),
Furthermore, owing to the imputed interest deduction, the funding amounts would grow to $610 by year 5, which would be used to fund the reclamation. As with the earlier examples, the foregoing treatment would result in the taxpayer’s after-tax “profit” in respect of the reclamation obligation being equal to nil, the same as the taxpayer’s before-tax “profit” in respect of the obligation.

The present value of the reclamation costs will increase by $38 (from $379 to $417), and the taxpayer will sustain a $100 loss once the $100 funding amount is invested in year 1, since that amount will never be recouped by the taxpayer (it will be expended entirely on the reclamation). Therefore, the taxpayer will sustain a net loss of $100 in year 1 ($38 minus $38 minus $100). The $100 loss will effectively represent the $100 funding amount invested in year 1. Similarly, over the course of year 2, the present value of the four not-yet-received $100 funding amounts will increase by $32 ($9, $8, $8, and $7, respectively), the present value of the reclamation costs will increase by $42 (from $417 to $459), and the taxpayer will sustain a $100 loss once the $100 funding amount is invested in year 2. Therefore, the taxpayer will sustain a net loss of $110 in year 2 ($32 minus $42 minus $100). The $110 loss will effectively represent the $100 funding amount invested in year 2 plus $10 of imputed interest expense computed on the funding amount that was invested in year 1. Over the course of year 3, the present value of the three not-yet-received $100 funding amounts will increase by $25 ($9, $8, and $8, respectively), the present value of the reclamation costs will increase by $46 (from $459 to $505), and the taxpayer will sustain a $100 loss once the funding amount is invested in year 3. Therefore, the taxpayer will sustain a net loss of $121 in year 3 ($25 minus $46 minus $100). The $121 loss will effectively represent the $100 funding amount invested in year 3 plus $11 of imputed interest expense computed on the funding amount invested in year 1 and $10 of imputed interest expense computed on the funding amount invested in year 2. Similar calculations made in respect of years 4 and 5 would show net losses of $133 and $146, respectively, representing the $100 funding amounts invested in each year plus the imputed interest expense computed on the funding amounts invested in previous years. In total, the taxpayer would deduct $100, $110, $121, $133, and $146 in years 1 through 5, respectively.

For a similar analysis, see Sunley, supra note 6, at 720–21. Sunley uses an example of an upfront investment that earns income in years 1 through 5 (similar to the funding amounts in example 2) and requires the outlay of reclamation costs in year 6. Sunley demonstrates that the depreciation deductions in each of years 1 through 5 should equal the changes in the present value of the future cash flows (the income and the reclamation costs) from the beginning of that year to the end of that year. Sunley concludes that this approach will always provide the theoretically correct result. That is, the after-tax return on a taxpayer’s investment will equal the before-tax return multiplied by \((1 - t)\), where \(t\) equals the taxpayer’s rate of tax. See also appendix 1 to this article, where a similar example illustrates economic depreciation applied to a regular capital investment (made at the beginning of the income-earning process) in combination with reverse depreciation applied to reclamation costs (made at the end of the income-earning process).

34 Owing to the imputed interest expense deductions, the $100 funding amount invested in each year would grow to $610 by year 5; the $610 expended in that year on reclamation would generate no further benefit to the taxpayer, thereby leaving the taxpayer with nil profit.

35 Alternatively, the reclamation obligation could be treated as both a depreciable asset that generated the $100 funding amounts in each of years 1 through 5 and a future obligation that generated no future benefit. Under this approach, the $379 “cost” of the asset (the present value of the obligation) would be depreciable over the five-year period using a “sinking-fund” economic depreciation approach. Thus, the taxpayer would deduct $62, $68, $75, $83, and $91.
To come full circle, assume instead that the taxpayer in example 2 charges a funding amount of $379 to its customers in year 0 (rather than the $100 amounts in years 1 through 5) and immediately invests such amount for the purpose of funding the reclamation costs. In other words, year 0 now becomes the funding year and $379 becomes the funding amount. In such a case, since the taxpayer will sustain a $379 loss in year 0 (because the present value of the reclamation costs will not be offset by any future funding amounts), the taxpayer should be allowed to deduct the entire $379 amount in year 0 and to deduct imputed interest expense thereon up to and including year 5. Owing to the deduction of imputed interest expense, this treatment would allow the $379 investment to grow to $610 by year 5, once again resulting in a nil after-tax “profit” for the taxpayer.

In summary, assuming that a taxpayer funds its reclamation obligation by charging funding amounts to its customers—in other words, the funding amounts are either incorporated into the price of the taxpayer’s goods or services or are procured by way of an additional income charge or fee—the appropriate income tax treatment, in terms of measuring the taxpayer’s income position, is to allow a full deduction for each funding amount in the corresponding funding year and to allow an imputed interest expense deduction computed on that amount up to reclamation year. This approach would effectively exempt from taxation the reclamation income earned from the funding year to the reclamation year. In those cases where the pattern of funding amounts is not known or where such amounts cannot reasonably be carved out from the taxpayer’s other income, it might be reasonable to assume a

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36 The interest expense would equal $38, $42, $46, $50, and $55 in years 1 through 5, respectively; combined with the $379 deduction in year 0, the total amount deducted would equal $610, the amount of the reclamation costs.

37 The $379 investment would grow after tax to $610 after five years, and the $610 expended in year 5 would generate no further benefit for the taxpayer.

38 As noted earlier at and around note 20, supra, the deduction should be allowed in the funding year whether or not the funding amount is actually invested in that year.

39 Of course, this treatment assumes that the aggregate funding amounts do not exceed the present value of the reclamation costs. In the case of an excess funding amount, it would represent a gain in the year in which it was received that would not be offset by the present value of the reclamation costs. Therefore, the excess should be treated like any other investment; that is, it should not be deducted immediately and no deduction should be allowed on account of imputed interest expense thereon.
constant funding amount pattern during the relevant income-earning period, as first assumed in example 2 above. In contrast, in the event that the taxpayer cannot or simply does not charge funding amounts to its customers, the taxpayer will sustain a loss in wealth in the obligation year equal to the present value of the reclamation costs. In such a case, the taxpayer should be allowed to deduct that loss in the obligation year (year 0 in all of the above examples) and imputed interest expense deductions up to the time of reclamation. However, unless otherwise noted, it is assumed for the purposes of the remaining discussion that taxpayers fund their reclamation obligations by charging funding amounts, and that such funding amounts are procured on a relatively constant basis over the applicable income-earning period prior to the reclamation.

As might be appreciated, the main practical problem with the reverse depreciation approach is that it requires some knowledge, or at least a reasonable estimate, of the future reclamation costs as of each funding year, since the aggregate funding amounts deducted should not exceed the present value of the reclamation costs. That is, to the extent that the funding amounts exceed the latter amount, they should not be currently deductible, nor should they be allowed to earn tax-exempt reclamation income. The determination or estimation of the reclamation costs could be provided under the relevant law or by the regulatory authorities governing the affected industries; alternatively, consideration might be given to the adoption of a method similar to the method of estimating reclamation costs under generally accepted accounting principles (GAAP). Interestingly, the QET provisions under the Act provide no limitations on the amount of allowable contributions to a QET (effectively, the funding amounts); instead, they implicitly defer to the contract between the QET and the provincial or federal government, or the applicable federal or provincial law that requires the maintenance of the QET, as the case may be.

40 In the in-between case, where the taxpayer charges funding amounts that are insufficient to fund all of the reclamation costs, the present value of the reclamation costs in excess of the present value of the funding amounts (as of the obligation year) should be deductible in the obligation year. The funding amounts should be deductible in the corresponding funding years.

41 Stated another way, the aggregate funding amounts deducted plus the aggregate imputed interest expense deducted should not exceed the future value of the reclamation costs.

42 Supra note 39.

43 The method of estimating reclamation costs for financial accounting purposes is described in Canadian Institute of Chartered Accountants, *CICA Handbook* (Toronto: CICA) (looseleaf), sections 3110.08 through 3110.10; and paragraphs A23 through A28 of appendix A to section 3110.

44 See the definition of “qualifying environmental trust” in subsection 248(1) of the Act; see also Carr, supra note 9, at 12. The Department of Finance might not be concerned with excessive contributions being made to a QET in any event, because the deduction of an excessive contribution will be offset by the inclusion of the after-tax value of such amount in the taxpayer’s income upon withdrawal from the QET. In other words, and in contrast to the reverse depreciation approach, the tax savings resulting from an excessive deduction at the time of contribution will be offset in economic terms by the tax payable on the subsequent “excessive” inclusion upon withdrawal, generating a wash for both the taxpayer and the government. See
contrast, the US Internal Revenue Code provides more explicit limitations on the
“funding amounts” that may be deducted currently on account of future reclamation
and nuclear decommissioning costs.\textsuperscript{45} For example, in the case of future nuclear
decommissioning activities, a current deduction is allowed if the amount so deducted
is charged to the taxpayer’s customers and contributed to a segregated reclamation
fund used for the purpose of satisfying the decommissioning obligation. The current
deduction is limited to the ruling amount in respect of the relevant year determined
by the secretary of the Treasury. In general terms, the ruling amount in respect of
each year will equal or approximately equal the portion of the total amount that
would be required to fund the decommissioning costs, based on a level funding
assumption over the life of the site and discount rates as the secretary deems
appropriate.\textsuperscript{46}

Interestingly, both the Canadian and the US statutory rules described above
replicate the deferral approach in economic terms, because the current deductions are
based on the after-tax present value of the future reclamation (or decommissioning)
costs and no further deductions are allowed in respect of imputed interest expense.\textsuperscript{47}
That is, assuming constant rates of tax, the current deduction of the after-tax present value of an amount to be expended in the future (the Canadian and US statutory positions) is the financial equivalent of a deduction of the entire amount in the future when it is expended (the deferral approach). Stated another way, the statutory rules fully subject the reclamation income to taxation and thus simulate the deferral approach.\(^48\) As discussed above, in order to replicate the reverse depreciation approach, the current deduction should be based on the before-tax present value of the reclamation costs, and, owing to the imputed interest deduction, such amount should be allowed to earn tax-exempt reclamation income up to the time of reclamation. The QET statutory rules are discussed in a later section of this article.\(^49\) As noted therein, the financial equivalence of the QET rules to the deferral approach is not unintended.

**Deferral Approach: Reclamation Income Fully Subject to Taxation**

Although some commentators view reverse depreciation as the theoretically correct approach for dealing with reclamation costs that reflect negative salvage value, others argue that the approach would not be appropriate because it would allow the reclamation income to escape taxation. According to this view, the failure to tax this reclamation income would be the equivalent of subsidizing the reclamation costs, which would have the effect of favouring such investments and violating the principle of neutrality.\(^50\) It is argued that the reclamation income must “belong” to someone—that is, it must accrue for someone’s benefit—and if so, the income should be subject to taxation in some manner. There are at least a couple of potential beneficiaries (or groups of beneficiaries) in this regard. However, assuming that these persons cannot be practicably taxed or they are not currently identifiable, it is argued that the deferral approach should be applied and that its application can be rationalized as a form of substitute taxation imposed on the taxpayer incurring the reclamation costs.\(^51\) (As discussed earlier, under the deferral approach, this taxpayer would be taxed on all of the reclamation income.)

\(^{48}\) Ibid. See also the discussion in the text below under the heading “Statutory Rules Economically Equivalent to Deferral Approach.”

\(^{49}\) See the discussion below under the heading “The Statutory Rules Governing Qualifying Environmental Trusts.”

\(^{50}\) For example, see Cunningham, supra note 13, at 601.

\(^{51}\) Ibid., at 601-9; and Halperin, “Interest in Disguise,” supra note 13, at 525-35. Mary Louise Fellows has argued that the deferral approach may be warranted on other grounds; see Mary Louise Fellows, “Future Costs Reconsidered: A Reevaluation of IRC Section 461(h)” (1989) vol. 44, no. 13 Tax Notes 1531-41, at 1539-41. Fellows argues that deferral may be justified owing to the fact that the recognition of some of the taxpayer’s increase in wealth—for example, the increase in a taxpayer’s mining facility as it is “brought to market”—is also deferred and the increase is not subject to taxation until it generates revenues. Interestingly, however, immediately after making this argument, Fellows suggests a form of depreciation that could apply to reclamation...
Perhaps the most obvious beneficiary of the reclamation income is the ultimate recipient of the reclamation services for or on behalf of the taxpayer incurring the reclamation costs (“the performer”). That is, once the obligation to reclaim is imposed on the taxpayer, the performer arguably enjoys wealth equal to the present value of the amount that it will be paid to perform the reclamation; the performer will also enjoy further increases in that wealth owing to the passage of time as the time of reclamation draws nearer. Accordingly, one might view the deferral approach as a form of substitute taxation imposed on the taxpayer on behalf of the performer, since the performer will not be taxed on the reclamation income even though some or all of it accrues for its benefit. However, this type of substitute taxation would be effective only to the extent that the taxpayer and the performer were in similar taxable positions up to the time of reclamation. More significantly, unless the performer could be identified and could be reasonably assured of receiving the reclamation income, it is not readily apparent why the performer should be taxed on any of the income in the first place. This income is not generally the type of income that we attempt to tax under our income tax system.

In contrast, Noël Cunningham has argued that, since the taxpayer will normally fund its reclamation obligation using amounts received on sales to its own customers (such as the funding amounts described herein), the customers should be viewed as earning imputed interest on such amounts. Under this view, consumers who want the taxpayer’s goods or services must bear their fair share of the reclamation cost, and the taxpayer is merely the custodian of a fund that is earmarked for this purpose. Essentially, Cunningham would treat a portion of the customers’ payments for the taxpayer’s current provision of goods or services as a prepayment on account of the future reclamation services. As a theoretical matter, taxpayers who prepay for future services should be taxed on imputed income reflecting the passage-of-time increase in the value of the services between the time of payment and the time that the services are rendered. In Cunningham’s view, since it would be impractical to tax all of the taxpayer’s customers directly in this manner, the deferral approach would effectively tax the taxpayer as a substitute for the customers (that is, by taxing the taxpayer in respect of the reclamation income). Cunningham argues that the taxpayer could in turn pass the additional tax burden on to the

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52 The performer will presumably be either the taxpayer’s employees or a third-party service provider.

53 Cunningham, supra note 13, at 601 and 606.

customers, by charging more for the current provision of its own goods or services.\textsuperscript{55}

As discussed previously, if the taxpayer in example 1 were subject to the deferral approach, the taxpayer would prefer to charge $109.75 to its customers in year 0 (the after-tax present value of the reclamation costs), rather than the $100 amount that it would charge if the reverse depreciation approach applied (the before-tax present value of the reclamation costs). In other words, if the deferral approach applied, the funding amount would likely be increased from $100 to $109.75.

In my view, the foregoing argument is not particularly compelling for a couple of related reasons. First, in most cases, the taxpayer’s customers cannot reasonably be viewed as prepaying for the reclamation services. Their payments made to the taxpayer are consideration for goods or services that are received concurrently from the taxpayer, and not for the future reclamation services, which are not rendered to the customers.\textsuperscript{56} Looked at another way, even assuming that a taxpayer can recoup its reclamation costs by charging more on the sale of its own goods or services (and this will not always be the case) does not necessarily mean that the reclamation services should be viewed as benefiting or “belonging” to the customers. For example, a firm that provides goods or services typically passes on to its customers (in the form of higher prices) its own costs incurred in respect of other goods or services provided to the firm. It would be unreasonable to suggest that the firm’s customers are the beneficiaries of any investment income required by the firm to fund its own costs. As discussed previously, if reclamation income inures to the benefit of anyone in particular, it likely inures to the benefit of the performer of the reclamation and not the taxpayer’s customers.

Second, it is not apparent that the taxpayer’s customers should be viewed as the only beneficiaries of the reclaimed site. As Cunningham himself argues, this benefit arguably inures to the state, in that the whole of society benefits from environmental reclamation.\textsuperscript{57} Perhaps, if all members of society should bear the tax on the reclamation income required to fund the benefit, the deferral approach could be justified as a form of substitute taxation in respect of all members of society. On the other hand, the income arguably should not be taxed at all, because it simply substitutes for a return that would not normally be taxed, such as the enjoyment of an environment that did not require reclamation.\textsuperscript{58} Similarly, assuming that the state is the beneficiary of the reclamation, one could argue that the income should be completely exempt from tax owing to the fact that the state is a tax-exempt entity. Consider, for instance, what would happen if the government imposed an

\textsuperscript{55} Interestingly, if some or all of the reclamation income is truly that of the performer (see the previous discussion in the text), the taxpayer in such case would effectively be passing on the performer’s tax burden to the taxpayer’s customers.

\textsuperscript{56} See also Kiefer, supra note 11, at 929-30. A similar point was made by the Tax Court of Canada in the Pedersen case, supra note 4, at 1090.

\textsuperscript{57} Halperin, “Interest in Disguise,” supra note 13, at 528-30; and Cunningham, supra note 13, at 608.

\textsuperscript{58} Halperin, “Interest in Disguise,” supra note 13, at 529.
additional tax to fund future reclamation costs in a particular case. If, in example 1, the government took responsibility for the reclamation and imposed a $100 levy or tax in year 0 for the purpose of funding that reclamation, the investment income earned by the government on that amount over the course of years 0 through 2 would be exempt from taxation. Accordingly, if the state is the true beneficiary of the reclamation, it appears that the deferral approach cannot be justified as a form of substitute taxation.

Interestingly, Donald Kiefer argues that the reverse depreciation approach does not result in any of the reclamation income escaping taxation, so that substitute taxation is not appropriate in any event. He views these types of reclamation costs as “reverse” depreciable capital investments that are conceptually similar to “regular” depreciable capital investments, except that the former are made at the end of the income-earning process while the latter are made at the beginning of the income-earning process. Kiefer argues that the reverse depreciable capital investment case, where there is no one “on the other side of the transaction” reporting income over the investment period, is exactly analogous to the regular depreciable capital investment case (such as the purchase of depreciable capital property), where there is no one “on the other side of the transaction” deducting imputed interest expense over the investment period (the useful life of the depreciable capital property). Kiefer argues that, if it is believed that there is untaxed reclamation income in the reverse capital investment case where reverse depreciation is employed so that imputed interest expense is deducted by the party making the investment, it must also be believed that there is undeducted expense in the regular capital investment case if economic depreciation is employed so that imputed income is taxed to the party making the investment. (Under economic depreciation, a party making a regular depreciable capital investment would be effectively subject to taxation on imputed income reflecting the passage-of-time increase in the present value of the future benefits generated by the investment. That is, the imputed income would serve to reduce the amount of the cost of the investment otherwise deductible in each year of the investment’s useful life.)

At the other extreme, Cunningham argues that reverse depreciation must be considered incorrect because it would effectively impose a negative income tax on the reclamation income. Unfortunately, I do not completely understand his argument in this regard. He presents it as follows. He states that the deferral approach,

59 Cunningham actually makes this point, supra note 13, at 608. However, he later concludes, at 615, “Not taxing this investment income is troublesome. When there is income, as there clearly is in this situation, an income tax should reach it. Is it possible for this income not to increase anyone’s wealth?”

60 Kiefer, supra note 11, at 930.

61 Samuelson, supra note 25; see also appendix 1, and in particular, the text in and accompanying note 173, infra.

62 Cunningham, supra note 13, at 609-10.
applied to negative salvage value, would allow the taxpayer to expense (fully deduct) the reclamation costs in the reclamation year. He further states that allowing an investor to expense a capital investment is financially equivalent to imposing a zero rate of tax on the income generated by the investment. He therefore assumes that the deferral approach would impose a zero rate of tax on the reclamation income generated by the taxpayer’s reclamation “investment.” Since the reverse depreciation approach would be more beneficial than the deferral approach, Cunningham concludes that the application of the reverse depreciation approach would result in a negative income tax. Cunningham’s argument would have merit if it were made in the context of reclamation costs that generated positive salvage value beyond the reclamation year; that is, the immediate deduction of an investment that generates future benefits (that is, a capital cost) is the equivalent of allowing the investment to earn a tax-exempt return. However, Cunningham expressly makes his argument in the context of costs that generate negative salvage value—that is, costs that generate no future benefits. Accordingly, his argument on this point must be incorrect.

In any event, the foregoing discussion leads us to a more compelling reason why reverse depreciation is not always defensible as a general rule. As noted above, the approach is predicated on the assumption that the taxpayer’s obligation to pay the future reclamation costs cannot reasonably be viewed as being offset by a commensurate benefit arising in the reclamation year or in subsequent years. Under this negative salvage value assumption, the taxpayer will sustain a decrease in wealth in either the obligation year or the funding year (and certainly before the reclamation year), so that reverse depreciation is justifiable. However, in certain cases, particularly where the taxpayer owns the reclaimed site or facility, one would think that there is at least some future benefit that will be generated by the reclamation. That is, some portion of the reclamation may add positive salvage value to the site or facility in the form of income-earning capacity in the reclamation year or in subsequent years. If so, the taxpayer’s obligation to fund that portion will be exactly offset by the present value of that future value or benefit, so that the taxpayer will not sustain a decrease in wealth in respect of that portion until the benefit is consumed or enjoyed. If the benefit is consumed in the reclamation year, the cost of that benefit (the portion of the funding amount relating to the positive salvage value) should be deducted as a current expense in that year. If the benefit endures

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64 Interestingly, none of the proponents of the reverse depreciation approach expressly states this assumption, although it is implicit in their reasoning.

65 A loss in wealth will be sustained in the obligation year if the taxpayer does not and will not receive funding amounts; see the text accompanying notes 38 to 40, supra.

66 If the taxpayer will receive a funding amount, the loss in wealth will not generally be sustained until the funding year: see the text accompanying notes 38 to 40, supra.
beyond the reclamation year, the cost of the benefit should be capitalized in the reclamation year. In either case, however, the cost of the benefit should not, as a general rule, be subject to reverse depreciation. These points are discussed in the section below.

**Reclamation Costs That Reflect Positive Salvage Value**

**Deferral Approach Generally Appropriate**

The analysis thus far has been based on the assumption that reclamation costs do not add positive value to the restored site or facility in the reclamation year. As noted, under this assumption, the reclamation costs represent negative salvage value only; that is, the only benefits to the taxpayer (generally, the funding amounts) are enjoyed before the reclamation year (generally, in the funding years). As illustrated earlier, under this assumption, the reverse depreciation approach would most accurately reflect the taxpayer’s income position up to the reclamation year.\(^{67}\) Note that in the absence of reverse depreciation, the negative salvage value would not have been otherwise subject to a regular depreciation deduction before the reclamation year, even to the extent that the related site or facility was depreciable capital property. That is, even if the cost of the property had been depreciated for income tax purposes to a nil cost during the taxpayer’s income-earning process, the negative salvage value would not have been subject to such depreciation for the simple reason that it would not have been reflected in the undepreciated capital cost of the property.\(^{68}\)

In this section, the assumption is changed and it is instead assumed that reclamation costs generate positive salvage value. For example, the reclamation could restore the site or facility to its original condition (that which existed before the taxpayer’s “contaminating” income-earning activities) or even bring additional value to the site or facility. Under these circumstances, reverse depreciation would not generally be appropriate, since the reclamation would generate value in the form of income-earning capacity that endured beyond the time of reclamation. Conceptually, reclamation costs that generate positive salvage value are identical to regular repair costs that restore a significantly damaged asset to its original condition (or improve upon it further). Generally speaking, significant repair costs should be

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\(^{67}\) See previous examples 1, 1A, and 2 and the accompanying text.

\(^{68}\) On the other hand, if it were possible to make an upfront improvement to the depreciable property that had the effect of preventing the reclamation (and the negative salvage value) at the end of the income-earning process, the cost of that improvement would have been added to the cost of the property and presumably would have been subject to a depreciation deduction (capital cost allowance) during the income-earning process. If such an upfront improvement could not be made such that reclamation was required at the end of the income-earning process, reverse depreciation of the reclamation costs would effectively serve the same function. Sunley, supra note 6, at 722-23, makes this point with a numerical example.
capitalized as of the year of repair and depreciated over time subsequent to the year of repair, and there certainly is no justification for a deduction on account of reverse depreciation in taxation years before the year of repair.

Assume, for example, that a taxpayer owns an asset at the end of year 0 with a cost of $379. The asset will wear out completely and will be worth nil at the end of year 5, although the taxpayer will then incur $610 in repair costs (equal to $379 in present value terms) to restore the asset to its original condition (but with a year 5 value of $610). In principle, the taxpayer should be allowed to depreciate the original cost of $379 over the first five years to correspond with the loss in the value of the asset. However, the taxpayer should not be permitted to recognize the anticipated repair costs in years 0 through 5—for example, by applying the reverse depreciation approach—even if the taxpayer is obligated as of the end of year 0 to incur those repair costs and in fact “funds” the future payment of the costs by making an investment in year 0 (that is, by investing a funding amount). The repair costs should simply be capitalized as of year 5 and the taxpayer should depreciate those costs over the next five years or whatever period of time is appropriate, depending on the anticipated useful life of the asset after the repairs are completed. The foregoing treatment is appropriate because the repair costs will not reflect a decrease in the taxpayer’s wealth until year 5 (and beyond). In particular, the present value of the repair costs as of year 0 ($379) will be offset by the present value of the repaired asset (also $379), and the taxpayer’s passage-of-time decrease in wealth in years 0 through 5 on account of its obligation to incur the repair costs will be offset by the passage-of-time increase in wealth represented by the ownership of the repaired and valuable asset in year 5. The taxpayer will not sustain a net decrease in wealth in respect of the repair until the repaired asset subsequently depreciates—that is, in year 5 and subsequent years.

Accordingly, in the analogous case where reclamation costs generate positive salvage value, the recognition of the costs should similarly be deferred and capitalized in the reclamation year, since the taxpayer will not sustain a decrease in wealth until the positive salvage value is consumed. (However, if a significant portion of the positive salvage value is consumed in the reclamation year, the reclamation costs should be deducted on a current basis in that year.)

69 However, under general principles, if the repairs are incidental or recurring and do not improve the quality of the asset beyond its original condition, the repair costs are often deductible as current expenses. See generally John W. Dunford, “The Deductibility of Building Repair and Renovation Costs” (1997) vol. 45, no. 3 Canadian Tax Journal 395-416.

70 In the in-between cases, where a portion of the reclamation costs reflects negative salvage value and a portion reflects positive salvage value, the costs relating to the former should be subject to reverse depreciation and the costs relating to the latter should be subject to deferral and capitalization.
When Reverse Depreciation May Be Appropriate

As noted above, the recognition of reclamation costs that reflect positive future salvage value should normally be deferred to the reclamation year. However, reverse depreciation could be justified in those cases where the restored site was non-depreciable capital property such as land. In particular, reverse depreciation could be justified as a surrogate measure of the actual depreciation of the property that occurred during the taxpayer’s “contaminating” business activities but was not recognized for income tax purposes.

Unlike most other “repairable assets,” land is not a depreciable property for income tax purposes and is not subject to a depreciation deduction. Depreciation, as it applies to a repairable asset, is meant to recognize the consumption of the value of the asset over its useful life while it is used for the purpose of earning income. As discussed earlier, if, near or at the end of the asset’s anticipated useful life, repair costs are incurred to restore the asset’s original value and to extend its useful life, the repair costs should be capitalized at the time of repair. Capitalization of the repair costs is said to “make good the depreciation previously allowed.” In other words, the repair costs effectively replace the previous depreciation of the asset with value that will be consumed in the future. Thus, in the case of a repairable asset that was subject to a depreciation deduction, capitalization of a significant repair expense is clearly appropriate. However, in the case of land, a depreciation deduction is not allowed while the land is being used for the purpose of earning income. Obviously, the lack of depreciation is appropriate in the vast majority of cases because land does not generally depreciate or become obsolete; to the contrary, it typically retains its value or increases in value in perpetuity. However, in those cases where land is damaged or contaminated and depreciates significantly in value in the course of income-earning activities, a depreciation deduction should be allowed as a matter of principle. Since depreciation of the land is not allowed in these circumstances under current law, reverse depreciation of the taxpayer’s reclamation costs could be justified as a surrogate measure of the depreciation of the land.

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71 See the discussion above under the heading “Deferral Approach Generally Appropriate.”


73 For example, assume that a taxpayer carries on a “contaminating” business on its land in years 1 through 5. The business activities will damage the land to the point where its value at the end of year 5 will be nil, although the taxpayer will incur reclamation costs at that time to restore the land to its original condition and value. In principle, it would be appropriate to allow the taxpayer to depreciate the cost of the land over the five-year period to coincide with the loss in its value. If this “regular” depreciation were allowed, the reclamation costs incurred in year 5 could then be treated like “regular” repair costs, since the previous consumption of the value of the land in years 1 through 5 would have been recognized through the depreciation of the cost of the land. However, since the cost of land is not depreciated under our income tax system, reverse depreciation of the taxpayer’s reclamation costs could be employed as a surrogate measure of the decrease in the taxpayer’s wealth over years 1 through 5.
of reclamation (the depreciation of the land) is not recognized for income tax purposes, there is a compelling argument that the taxpayer’s corresponding increase in wealth (the passage-of-time increase in the positive salvage value represented by the reclamation income) similarly should not be recognized. If reverse depreciation were applied in these circumstances, it would be necessary to limit the aggregate amount claimed as reverse depreciation to the amount by which the taxpayer’s cost of the land exceeded its fair market value immediately prior to the reclamation, since, as noted, the reverse depreciation of the reclamation costs would serve only as a surrogate for the actual depreciation of the cost of the land. A similar analysis would apply to depreciable property that had a low depreciation rate that significantly understated the decrease in the value of the asset while it was damaged or contaminated.

Reverse depreciation could similarly be justified if the taxpayer was obligated to incur reclamation costs in respect of a leased or licensed site, in which the taxpayer had no proprietary interest after the reclamation. That is, the reclamation in this case would reflect negative salvage value to the taxpayer; any positive salvage value would inure solely to the benefit of the owner of the land. Furthermore, for reasons discussed above, the owner would not necessarily enjoy an increase in its net wealth as a result of the reclamation. That is, the passage-of-time increase in the value of the reclamation (the positive salvage value) would be partially or wholly offset by the decrease in the value of the owner’s land as it was damaged by the taxpayer’s business activities. Arguably, there would be little or no net “income” that should be taxed to the owner, so that a substitute taxation rationale such as that described earlier would not be applicable if the taxpayer was subject to taxation on the reclamation income (that is, if the deferral approach applied to the taxpayer). Similar to the analysis provided above, since the owner would not be allowed to depreciate the cost of the land as it was damaged and decreased in value, the corresponding passage-of-time increase in the value of the reclamation (effectively represented by the reclamation income) arguably should not be subject to taxation as it accrues. Furthermore, if the owner of the land was the Crown, it would be exempt from taxation in respect of such passage-of-time “income” in any event.

To my knowledge, the foregoing arguments have not been advanced in the literature as possible justification for the reverse depreciation of reclamation costs that generate positive salvage value. However, Calvin Johnson has considered whether a similar argument could be advanced for allowing for a current deduction, in the reclamation year, of reclamation costs that are otherwise on capital account. In the United States, the courts have established a so-called restoration principle, under which reclamation costs are fully deductible as current expenses in

74 See the discussion under the heading “Deferral Approach: Reclamation Income Fully Subject to Taxation.”
75 Johnson, supra note 10, at 1335-38.
the reclamation year to the extent that they restore the underlying asset to its original condition—that is, to the condition of the asset before the taxpayer’s contaminating activities that damaged it.\textsuperscript{76} The Internal Revenue Service has generally accepted this principle.\textsuperscript{77} However, for reasons similar to those provided earlier in the text (regarding “regular” significant repairs), Johnson and other American commentators have criticized the restoration principle and have argued that it must be wrong as a rule of general application. These commentators correctly argue that reclamation costs that restore the value of a damaged asset should normally be capitalized if that value endures beyond the reclamation year; it should be irrelevant in such a case that the reclamation “only” restores the asset to its precontaminated condition, since the restoration brings new enduring value to the asset.\textsuperscript{78} As Johnson notes, if a taxpayer in these circumstances claimed a deduction on account of the previous loss in the value of the property (for example, by way of a previous depreciation deduction), allowing a current expense for the reclamation would effectively amount to a double deduction on account of that loss.\textsuperscript{79} Johnson goes on to consider the case where the previous loss in the value of the property was not deductible, as would be the case with land. In particular, he considers whether a current deduction of the reclamation costs should be allowed in such case to compensate for the non-depreciation of the cost of the property as it previously decreased in value. Unfortunately, Johnson simply concludes that if the non-recognition of the previous loss was “justified by the principle of ‘nonrealization’ or some other tax policy . . . it should not be allowed by indirection via the expensing of a perfectly fine replacement investment [in the form of reclamation costs].”\textsuperscript{80}

In a recent article, John Lee undertook a similar analysis to rationalize his position that a current deduction (in the reclamation year) should be allowed for certain capital reclamation costs.\textsuperscript{81} Like Johnson, Lee argues that reclamation costs that generate significant value beyond the reclamation year should normally be capitalized, as are any other repair costs that generate such value. However, Lee maintains that a current deduction could be justified in those cases where the reclaimed asset was land (or depreciable property subject to low depreciation rates), if the lack of a depreciation deduction in future years (or a low rate of depreciation during those years) would understate the expected future decrease in the property. For example, the foregoing circumstances might present themselves if the taxpayer were to carry on further contaminating business activities on the land after the

\textsuperscript{76} The leading decision is \textit{Plainfield-Union Water Co.}, 39 TC 333, at 338 (1962).

\textsuperscript{77} Internal Revenue Service, Technical Advice Memorandum 199952075, August 28, 1999; and Rev. rul. 94-38, 1994-1 CB 35.

\textsuperscript{78} Johnson, supra note 10, at 1335-38; and Lee, supra note 10, at 813-14.

\textsuperscript{79} Johnson, supra note 10, at 1337.

\textsuperscript{80} Ibid.

\textsuperscript{81} Lee, supra note 10.
reclamation was performed. Lee argues that under these circumstances, capitalization would not necessarily be appropriate because capitalization without depreciation could distort the taxpayer’s income position more than a current deduction. In summary, Lee argues that the lack of a depreciation deduction for reclamation costs after the reclamation year may justify a current deduction of the costs in the reclamation year, in contrast to the rationale provided in the text above, under which it is argued that the reverse depreciation of reclamation costs may be justified owing to the lack of a depreciation deduction before the reclamation year.

Finally, some commentators have advanced a similar argument in contending that a current deduction (in the reclamation year) should be allowed for reclamation costs to the extent that they relate to previously unknown contamination that occurred before the taxpayer’s acquisition of the land.82 Generally speaking, the argument goes as follows. If a taxpayer acquired land unaware of its pre-existing contamination or defects, the taxpayer presumably overpaid for it; the overpayment nonetheless formed part of the non-depreciable cost of the land. If the contamination is subsequently discovered and the taxpayer is required to reclaim the land, the reclamation costs should be deducted on a current basis in order to avoid a “double counting” of the taxpayer’s acquisition costs. That is, if the reclamation costs were required to be capitalized (effectively treated like deferred acquisition costs), the taxpayer’s total cost of the land would be overstated. In essence, similar to the reverse depreciation rationale provided above, these commentators argue that a current deduction of the reclamation costs should be allowed to compensate for the fact that the taxpayer was not allowed to previously deduct the overpayment in respect of the acquisition cost of the land, even though the overpayment presumably represented a decrease in the taxpayer’s wealth.83

THE TREATMENT OF RECLAMATION COSTS UNDER THE CANADIAN INCOME TAX SYSTEM

Overview of GAAP, the Common Law Principles, and the Statutory Response

As discussed earlier, taxpayers that operate mines, quarries, or waste landfill sites, or that carry on other contaminating business activities, are often obligated to reclaim the sites and related facilities after they are closed and no longer producing income. Some such taxpayers as well as some commentators have argued that reclamation costs should be recognized for income tax purposes once the obligation to reclaim is imposed or once it is reasonable to conclude that reclamation will

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82 Ibid., at 818-19; Yancey, supra note 10, at 960; and David G. Coolidge, “A Square Hole for a Square Peg: Section 165 and Environmental Cleanup Costs” (1995) vol. 14, no. 4 Virginia Tax Review 779-819, at 794-95.

83 If the taxpayer had been aware of the contamination at the time of acquisition, it presumably would not have overpaid for the land, and the foregoing issues would not arise.
be necessary, and that the recognition of the costs should therefore parallel the treatment of such costs under GAAP.

Before 2004, GAAP provided that when a firm’s reclamation costs were reasonably determinable, provisions were to be made for such costs, net of expected recoveries, if the likelihood of their incurrence was established as a result of environmental law or contract, or because the firm had established a policy to restore a site. The reclamation costs were then amortized over the life of the underlying asset or site in a rational and systematic manner. Effective for fiscal periods beginning after 2003, GAAP provide an approach that is similar to the reverse depreciation approach. In general terms, a legal obligation to reclaim, whether it arises by statute, ordinance, or written or oral contract, or under the doctrine of promissory estoppel, is recognized once a reasonable estimate of its fair value can be made. The discounted present value of the future reclamation costs is set up as a liability (an “asset retirement obligation”) along with a corresponding “asset retirement cost.” The cost is then amortized on a systematic and rational basis, generally over the life of the related asset or site. Furthermore, the passage-of-time increase in the liability, using a credit-adjusted rate of interest, is deducted as a periodic expense up to the time of reclamation, this amount is referred to as “accretion expense” and is essentially the same as the imputed interest expense deducted under the reverse depreciation approach. If the current GAAP were applied to example 2, the $379 present value of the reclamation costs would be amortized over years 1 through 5 (in a rational and systematic manner), and the annual passage-of-time increase in the present value of the liability would be deducted in each relevant year. The current GAAP treatment of reclamation costs is therefore similar to the reverse depreciation approach, although the GAAP approach does not take into account (at least not explicitly) the relevant funding amounts.

In contrast to the GAAP treatment, the common law treatment of reclamation costs generally follows the deferral approach. In particular, under general principles, reclamation expenses are recognized for income tax purposes in the year in which they are incurred as a matter of law, which normally means the reclamation year. Therefore, funding amounts invested in reclamation funds or invested otherwise

84 The cases are discussed in the text below. The commentators include McClure, supra note 9, and Carr, supra note 9.
85 Presumably, the “expected recoveries” would constitute positive salvage value rather than negative salvage value.
86 *CICA Handbook*, supra note 43, at sections 3061.35 to 3060.37 (withdrawn).
87 Ibid., at sections 3110.05 and 3110.13.
88 Ibid., at section 3110.13.
89 Ibid., at section 3110.16.
90 The current GAAP treatment is illustrated in more detail in appendix 2 to this article.
91 Whether the reclamation costs are deductible in full in the reclamation year depends on their legal classification as either current or capital expenses.
for the purpose of funding reclamation costs are generally not deductible until the reclamation year. Generally speaking, the Canadian courts have refused to allow an earlier deduction for such costs on the grounds that the legal obligation to pay them is conditional until the reclamation year, either because the obligation itself does not arise until the reclamation year or because the quantum of the obligation cannot reasonably be determined until that year. The courts have therefore focused on the contingent nature of such obligations and have not been required, for example, to analyze in any detail whether an earlier deduction of such costs would reflect a more accurate portrayal of the taxpayer’s income position. The Canada Revenue Agency (CRA) has historically taken the same general position that reclamation costs are not recognized for income tax purposes until the reclamation year.92

Some taxpayers have unsuccessfully attempted to deduct reclamation expenses or a reasonable estimate of such amounts before the reclamation year, namely, during the taxation years in which their sites were still operating and earning income. For example, in the Burnco case,93 the taxpayer carried on an excavation business in a gravel pit and, pursuant to a contract with the local municipality, was required to post a performance bond to secure its obligation to backfill the area after the excavation. The costs of backfilling were not known in the year in which the excavation was carried out and were not paid until a subsequent year. However, the taxpayer estimated the costs and claimed a deduction in the year in which the excavation was carried out. Both the Tax Review Board and the Federal Court Trial Division were willing to allow the deduction. Mahoney J of the Federal Court held that the taxpayers had an existing legal obligation to pay the costs, even though the costs could not be ascertained with certainty:

The fact that, as at year end, the amount was not ascertained is not a determining factor. Neither is the fact that the basis for its most reliable estimation was not all in existence as at the year end. The obligation to backfill arose as the gravel was removed. It was certain that there would be a cost. That cost was “an expense incurred during the year.” . . .

There was no contingent element in the Defendant’s liability to backfill. That the cost had to be estimated does not render it contingent.94

However, the Federal Court of Appeal overturned the decision and disallowed the taxpayer’s deduction. The court refused to accept the rationale that an obligation to pay an uncertain amount in the future could be recognized as a current unconditional obligation. To the contrary, the court held:


93 The Queen v. Burnco Industries Ltd. et al., 84 DTC 6348 (FCA); rev’g. 82 DTC 6001 (FCTD) and 80 DTC 1705 (TRB).

94 Ibid., at 6004-5 (FCTD).
In our opinion, an expense, within the meaning of paragraph 18(1)(a) of the Income Tax Act, is an obligation to pay a sum of money. An expense cannot be said to be incurred by a taxpayer who is under no obligation to pay money to anyone. Contrary to what was decided by the Trial Judge... an obligation to do something which may in the future entail the necessity of paying money is not an expense.95

In the Nomad Sand and Gravel case,96 the taxpayer carried on the business of operating a sand and gravel pit. Pursuant to the Pits and Quarries Control Act of Ontario, the taxpayer was required to submit a post-closure rehabilitation plan and pay a levy that was imposed on the material extracted from the pit as security toward the cost of the rehabilitation. The levy was refundable to the taxpayer if and when the rehabilitation of the pit was completed. If the taxpayer did not rehabilitate the pit, the levy would be forfeited and the Ontario Minister of Mines and Northern Affairs could use the funds to carry out the rehabilitation. The taxpayer attempted to deduct the levies when they were paid, but the Federal Court of Appeal disallowed the deduction. The court held that the levies were not “incurred” expenses when they were paid, but rather were in the nature of security deposits, meant to secure the rehabilitation of the gravel pit. In particular, the court held that since the deposits did not become the absolute property of the provincial government when they were paid (they would become property of the government only in the case of the taxpayer’s forfeiture), they had not been incurred as expenses as a matter of law.

In the Pedersen case,97 the taxpayer operated a waste landfill site under a licence granted by the Ontario Ministry of the Environment. Under the terms of the licence, the taxpayer was obligated to provide a plan of closure and rehabilitation, although there was no legislation in place requiring the taxpayer to post financial assurance or otherwise secure the reclamation. Nonetheless, the taxpayer estimated its future reclamation costs and attempted to deduct them in a taxation year in which the site was still under operation. Rip J of the Tax Court of Canada held that the costs were contingent because the taxpayer was under no contractual or statutory obligation to pay them, notwithstanding that it was reasonably expected that the taxpayer would be required to pay them in the future. Interestingly, the taxpayer in the Pedersen case also made the unique argument that a significant portion of the landfill fees that it collected from its customers was to be used to fund the reclamation of the landfill site, even though this fact was not explicitly set out in the contracts with the customers or under the terms of its operating licence. The taxpayer thus argued that this portion of those fees was on account of reclamation services to be rendered after the end of the taxation year in which they were collected. According to the taxpayer, that portion of the fees was included in its

95 Ibid., at 6348-49 (FCA).
96 The Queen v. Nomad Sand and Gravel Limited, 91 DTC 5032 (FCA).
97 Supra note 4.
income under paragraph 12(1)(a) (which includes amounts received on account of future services) and was therefore eligible for the paragraph 20(1)(m) reserve (which allows a deduction of amounts included under paragraph 12(1)(a) on account of future services). This treatment would have allowed the taxpayer to defer the inclusion of that portion of the fees to the years in which the reclamation costs were expended on the reclamation activities (namely, the reclamation years). However, Rip J held against the taxpayer on this point and disallowed the reserve. The judge held that the contracts between the taxpayer and its customers provided that the fees were paid in consideration for the collection of the customers’ waste only, and that there was no evidence in the case that suggested that a portion of the fees was on account of the future reclamation services. Similarly, the judge noted that the reclamation services would not be provided to the taxpayer’s customers.

In the *Northwood Pulp and Timber* case,98 the taxpayer carried on the business of harvesting logs and manufacturing finished timber, which required the taxpayer to obtain a harvesting licence under the Forest Act of British Columbia. Under the terms of the licence, the taxpayer was required to submit a plan of silviculture and to carry out, at its own expense, the reforestation under that plan of the area from which timber was harvested. In one of the years in which the harvest was carried out, the taxpayer included the estimated costs of the future reforestation expenses in its cost of inventory for both financial accounting and income tax purposes. The Crown argued that only the actual costs of reforestation could be deducted for income tax purposes, and only as so-called period costs in the year in which the reforestation took place (“the reforestation year”). The Federal Court of Appeal agreed with the Crown’s argument, holding that the costs would not be incurred until the (subsequent) reforestation year: “We agree that these expenses were properly period expenses rather than inventory costs because the actual expense would not be incurred until a subsequent period.”99 Although the matter is not entirely clear, it appears that the court’s decision on the “incurrence” issue was premised on the uncertainty of the future reforestation costs. The court noted that, owing to factors outside the control of the taxpayer (such as natural regeneration or the destruction of a new crop of trees), the taxpayer’s estimated costs could well turn out to be less or greater than the actual reforestation costs required in the reforestation year. The court also noted that the fact that the taxpayer’s treatment of the reforestation costs was acceptable under GAAP did not dictate that these costs should be treated similarly for income taxation purposes. In particular, the court cited a statement of the Supreme Court of Canada in the *Canderel* decision100 to the effect that GAAP cannot always be determinative for income tax purposes because GAAP are “usually concerned with providing a comparative picture of profit from

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98 Supra note 3.
99 Ibid., at 6641 (FCA).
100 *Canderel Limited v. The Queen*, 98 DTC 6100 (SCC).
year to year,” whereas an income tax system “is solely concerned with achieving an accurate picture of income for each individual taxation year for the benefit of the taxpayer and the tax collector.” However, the court did not explain how the deferral of the recognition of the reforestation costs to the reforestation year best achieved an accurate picture for each individual taxation year of the taxpayer relative to the current recognition of such costs.

As a result of the common law developments and the perceived inequity of the income tax treatment of reclamation expenses, the mining industry lobbied the federal government extensively for legislation that would provide more favourable income tax treatment for amounts contributed to mining reclamation funds. The main practical concern with the common law position was that losses on account of reclamation costs were often of little or no utility to mining operators, owing to the three-year carryback restriction on non-capital losses. That is, reclamation losses incurred more than three years after the site’s closure would often expire, particularly in the case of single-purpose corporations that had no revenues in the years after closure.

In the 1994 federal budget, the government responded to the concerns of the mining industry and proposed a new statutory regime for mining reclamation expenses. The resulting statutory rules governing the use of “mining reclamation trusts” were introduced to accommodate mining companies using such trusts to fund their reclamation obligations required under provincial or federal law. In 1998, the statutory rules were expanded to encompass other reclamation activities carried on by any “qualifying environmental trust,” which is described in more detail in the text below. Under the statutory rules, a taxpayer who uses a QET as a vehicle to accumulate funds for the purpose of discharging the future reclamation obligation can claim a deduction in the year in which amounts are contributed to the QET. This provision allows taxpayers to claim current deductions (on account of their future reclamation obligations) during the operating phases of their mines, quarries, or landfill sites. Accordingly, the reclamation costs can effectively be “matched” against and deducted from the income earned during the operating phase. This statutory treatment is potentially more beneficial than the common law treatment because, as noted, the latter can result in the reclamation costs never being deducted owing to the loss carryback restrictions. However, where the loss carryback restrictions do not come into play, the statutory treatment generally leaves a taxpayer in the same after-tax position as would be seen under the common law position. (This point is illustrated in more detail in the text below.) Not surprisingly, the affected industries, particularly the mining industry, have argued that the

101 Supra note 3, at 6641 (FCA).
102 Carr, supra note 9, at 4-5.
103 Typically, during the reclamation phase, there would be no corresponding income, so that the reclamation costs would generally generate losses.
statutory rules do not go far enough to accommodate their concerns. Furthermore, since the statutory rules deal only with environmental trusts, they do not apply to other financial arrangements made for the purpose of funding future reclamation costs, nor do they apply to other affected industries such as the nuclear and offshore oil and gas industries. Therefore, the common law position remains applicable to these other arrangements (that is, all other “funding amounts”) and other industries.

The Statutory Rules Governing Qualifying Environmental Trusts

Statutory Rules Economically Equivalent to Deferral Approach

As noted, the statutory rules governing QETs were introduced to accommodate taxpayers that used reclamation trusts to fund their reclamation obligations under provincial or federal law. A QET is defined as a trust that is maintained for the sole purpose of funding the reclamation of a site that has been used primarily for the operation of a mine, the extraction of clay, peat, sand, shale, or aggregates, or the deposit of waste. The maintenance of the trust must be required by federal or provincial law or under a contract between the taxpayer and the federal or a provincial government.

Under the statutory rules, a taxpayer who uses a QET as a vehicle to accumulate funds for the purpose of discharging future reclamation costs can claim a deduction in the year in which amounts are contributed to the QET. The QET is taxed annually on the investment income earned on the contributions (the reclamation income). The taxpayer-beneficiary includes in income its share of the reclamation income earned in the QET, but is allowed a refundable credit in respect of the tax paid by the QET, so that the reclamation income earned up to the commencement of the reclamation is effectively subject to tax at the taxpayer’s rate of tax.

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104 Carr, supra note 9, at 7.
105 However, as discussed later in the article, there is some authority, based on the Meloche decision, supra note 4, that a current deduction on account of future reclamation may be claimed under the reserve of paragraph 20(1)(m) of the Act (reserve for services to be rendered in future years). See the discussion under the heading “Recent Developments Relating to the Inclusion of Unearned Income.”
106 If the law has not been enacted or the contract has not been entered into, the trust can still qualify as a QET if the law is enacted or the contract is entered into within a year after the creation of the trust. The complete definition of “qualifying environmental trust” is found in subsection 248(1) of the Act.
107 Paragraph 20(1)(ss) of the Act.
108 Subsection 211.6(1) of the Act.
109 Subsection 107.3(1) of the Act.
110 Section 127.41 of the Act.
111 Owing to the logistics of the QET rules, the effective annual rate of tax on the investment (reclamation) income may not exactly coincide with the taxpayer’s annual rate of tax if the QET and the taxpayer have different taxation years.
Withdrawals of the contributions and the income earned inside the trust are included in the taxpayer’s income in the year of withdrawal, and such amounts are deductible to the taxpayer under general principles when they are spent on the reclamation.

Interestingly, despite the earlier deduction allowed under the statutory rules, on an after-tax basis and after accounting for the time value of money, a taxpayer’s liability to pay future reclamation costs will generally be the same whether it is funded by way of a deductible contribution to a QET or by way of an investment made outside a QET. In other words, in economic terms, little has really changed from the common law deferral approach. This somewhat peculiar state of affairs flows from the general principle that the current deduction of an amount (a contribution to a QET) is exactly offset, in economic terms, by a subsequent inclusion of the after-tax value of the amount (a withdrawal from the QET), so that the deduction/inclusion scheme of the QET rules effectively results in a wash. The point can be illustrated as follows, using the facts from the previous example 1. First, assume that the taxpayer in example 1 uses a QET to fund the reclamation and that the QET and the taxpayer can earn the same rate of return on their investments (and as noted above, under the statutory rules, the reclamation income earned in the QET is effectively subject to taxation at the taxpayer’s rate of tax). Since the taxpayer will require $121 in year 2 to pay for the reclamation, and since the reclamation income earned inside the QET will be fully subject to taxation on an annual basis, the taxpayer must invest the present value of $121 discounted using the after-tax rate of return (5 percent per annum). Accordingly, the taxpayer will contribute $109.75 in year 0, which will grow, after tax, to $121 as of year 2. The taxpayer will deduct the $109.75 amount in year 0. When the taxpayer withdraws the $121 amount in year 2, it will be included in the taxpayer’s income; assuming that it is spent on the reclamation and is deductible on a current basis, the taxpayer will report no net income in year 2. On the whole, after tax, the use of the QET will cost the taxpayer

112 Paragraph 12(1)(z.1) of the Act.

113 It is understood that the statutory rules are intended to be tax-revenue-neutral to the government. The loss of tax revenues resulting from the upfront deductibility of the QET contributions is expected to be restored by the taxation, upon withdrawal, of the contributions and the after-tax income earned in the QET. See Carson, supra note 9, at 14:2 and 14:20.

The statutory QET rules appear to be modelled on the US statutory rules governing amounts contributed to a “Nuclear Decommissioning Reserve Fund” (“the fund”) for the purpose of funding future decommissioning services; see section 468A of the Code. Under that provision, a deduction is allowed for a taxpayer’s contributions to the fund in the year of contribution. The fund is subject to taxation on an annual basis, amounts withdrawn are included in the taxpayer’s income upon withdrawal, and the taxpayer is allowed to deduct such amounts in the reclamation year (to the extent that they are spent on nuclear decommissioning services). In other words, the system is virtually identical to the Canadian QET system; in particular, similar to the Canadian rules, the US rules are meant to be the economic after-tax equivalent of deferring the deduction of the costs until the reclamation year (that is, the deferral approach).
the case for "reverse depreciation" of reclamation costs

If, instead, the taxpayer does not use a QET, it will be subject to the common law rules, and the reclamation costs will not be recognized until year 2. Assuming, as above, that the $121 cost of reclamation is fully deductible in year 2, this approach will cost the taxpayer $60.50 in year 2 dollars, the same net amount that would be expended if the QET were used.

Some commentators have incorrectly argued that the QET statutory rules impose double taxation on the reclamation income and therefore impose a greater tax burden than that under the common law position. Their argument is based on the fact the reclamation income is first subject to taxation when it is earned in the QET and is further subject to taxation when it is withdrawn from the QET. However, as illustrated above, in economic terms, the taxpayer’s inclusion of its withdrawal from the QET effectively offsets the taxpayer’s previous deduction of its contribution.

114 In year 0, the taxpayer contributed and deducted $109.75, so that the taxpayer’s after-tax cash flow was $54.88 (50 percent tax rate); in terms of year 2 after-tax dollars, this amount equals $60.50. In year 2, the taxpayer withdrew $121 and immediately spent it on reclamation activities; furthermore, the $121 inclusion was exactly offset by the $121 deduction, so that there was no net cash flow after tax in year 2.

115 That is, $60.50 equals the $121 reclamation costs net of the $60.50 tax savings.

116 On a more general level, the point can be proven as follows. If one assumes that the requisite funds must be invested in the same manner whether the funding takes place inside or outside the QET, the before-tax rate of return on investment income earned inside the trust will equal the before-tax rate of return on investment income earned by the taxpayer outside the trust. In other words, the trust’s before-tax return will equal the taxpayer’s before-tax return. As noted in the text above, the investment income earned inside the QET will be effectively subject to tax at the taxpayer’s rate of tax. Accordingly, if a taxpayer contributes an amount x to the QET, the funds will grow to x grossed up by the taxpayer’s after-tax rate of return over the period of investment. Let us call that amount y, the amount that will be required to pay the reclamation costs. The amount y will be included in the taxpayer’s income upon withdrawal from the QET and its deduction will be governed by general principles.

Assume, instead, that the taxpayer funds the reclamation liability outside the QET. Again, if the taxpayer sets aside amount x, it will grow at the taxpayer’s after-tax rate of return over the period of investment to the amount y. The amount y will be used to pay the reclamation costs and its deduction will be governed by general principles. As can be seen, the only difference between the two scenarios is that the investment in the QET involves a deduction of x in the contribution year and an income inclusion of y in the withdrawal year, whereas the investment outside the QET obviously involves neither. However, assuming that the taxpayer’s rate of tax is constant in each year, it is easily shown that the tax savings or refund generated by the deduction of x in the contribution year equals, in present value terms, the tax payable as a result of the inclusion of y in the withdrawal year. (This result stems from the general principle to the effect that the inclusion [deduction] of an amount in one year is the financial equivalent of an inclusion [deduction] of the future value of that amount in a subsequent year, computed using the taxpayer’s after-tax rate of return.) Accordingly, in economic terms, the contribution and withdrawal under the QET route will be a wash after tax. On the whole, the taxpayer’s after-tax position will be the same, in present value terms, whether the reclamation costs are funded within the QET (and are thereby subject to the statutory rules) or outside the QET (in which case the common law rules apply).

117 Carr, supra note 9, at 21-23; Carson, supra note 9, at 14:19; and McClure, supra note 9, at 5:12.
to the QET.118 Accordingly, even though the reclamation income is nominally included in the tax base twice, it is effectively subject to taxation only once, when it is earned in the QET. As illustrated above, this treatment is equivalent in economic terms to the common law position.

However, as discussed, the QET statutory system may be beneficial in certain circumstances relative to the common law deferral approach owing to the loss carryback restrictions. Some taxpayers, particularly single-purpose corporations, are in a better position to utilize an earlier deduction taken in the contribution year (the statutory system) as opposed to a later deduction of the costs incurred in the reclamation year (the common law deferral approach). On a related point, the earlier deduction may be beneficial because it can increase cash flow during the taxpayer’s business operations. Unfortunately, since the statutory rules apply only to contributions (the “funding amounts”) made to QETs, taxpayers that use other methods of funding future reclamation costs do not enjoy these benefits.

Possible Justification (or Not) for the Statutory Rules

Relative to the reverse depreciation approach, the statutory system imposes a greater tax burden on a taxpayer that uses a QET in order to fund future reclamation costs. Effectively, an immediate deduction is allowed equal to the present value of the reclamation costs discounted using the taxpayer’s after-tax rate of return, with no further deduction allowed for the increase in the present value of the costs owing to the passage of time. Accordingly, similar to the difference between the reverse depreciation approach and the deferral approach, the difference between the reverse depreciation approach and the statutory treatment stems from the fact that the former would exempt from tax the reclamation income earned to fund the reclamation costs, while the latter fully taxes the reclamation income. The reverse depreciation approach could be replicated by exempting from tax the reclamation income earned inside the QET, effectively treating it like an RRSP.119

The Department of Finance has not provided the rationale underlying the statutory QET treatment, other than indicating that the treatment is intended to be revenue-neutral relative to the common law position.120 (As already noted, the statutory rules are economically equivalent to the common law treatment after accounting for the time value of money.) The statutory rules and the apparent overtaxation of the reclamation income of the QET might be rationalized on the same grounds as those set out earlier in the discussion relating to the deferral approach. That is, one could argue that the reverse depreciation approach would

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118 Both Carr, supra note 9, at 23, and Carson, supra note 9, at 14:20, note that the Department of Finance has made a similar argument, although they appear to disagree with the argument.

119 As noted earlier, the mining industry has lobbied for this type of treatment. See Carr, supra note 9, at 5-7.

120 See supra note 113.
incorrectly allow the reclamation income to escape taxation. This income presumably inures to someone’s benefit, and if so, it should be recognized for income tax purposes in some manner. As discussed earlier, there are at least a couple of potential groups of beneficiaries who should arguably be taxed on the income. If these persons are not currently identifiable or if they cannot practically be taxed, the deferral approach and/or statutory treatment might be viewed as a form of substitute taxation imposed on the taxpayer incurring the reclamation costs. However, in my view, for reasons discussed earlier, this substitute taxation rationale is difficult to justify.121

The statutory QET rules might be better rationalized under the positive salvage value rationale described earlier in the text.122 As discussed therein, if it were determined that reclamation costs add some positive salvage value in the reclamation year or in subsequent years, the statutory rules (and the deferral approach) might be more appropriate than reverse depreciation, which is rationalized under a negative salvage value assumption. However, one would think that the Department of Finance, the relevant regulatory authorities, and the affected industries could come to some kind of consensus as to types of reclamation costs that typically reflect negative salvage value and those that typically generate positive salvage value. If so, the reverse depreciation approach could be adopted for reclamation costs that reflect negative salvage value.

The statutory rules might be defended using a neutrality argument. That is, the statutory treatment is economically equivalent after tax to the common law deferral approach, and, as noted, it appears that the Department of Finance intended that the statutory treatment be revenue-neutral relative to the common law position. If the statutory rules instead employed a form of reverse depreciation, taxpayers would be encouraged to use QETs to fund their reclamation obligations and would be discouraged from funding their obligations outside QETs (since other funding arrangements would be subject to the common law deferral approach). Of course, the foregoing analysis begs the question whether the common law deferral approach should be replicated in the first place. As already discussed in some detail, to the extent that reclamation costs reflect negative salvage value, the deferral approach understates the reclamation obligation and overtaxes the taxpayer in respect of the reclamation income. Therefore, in the negative salvage value cases, the neutrality argument holds only because the deferral approach does not correctly account for the taxpayer’s income position. As ably argued by Emil Sunley and Donald Kiefer, if the reverse depreciation approach properly applied to all negative salvage value reclamation costs, whether funding amounts were invested or not (that is, whether contributions were made to QETs or not), the approach would likely be more

121 See the discussion above under the heading “Deferral Approach: Reclamation Income Fully Subject to Taxation.”

122 See above under the heading “Reclamation Costs That Reflect Positive Salvage Value.”
neutral than the deferral approach, owing to the fact that the latter incorrectly increases the taxpayer’s tax liability.123

On a more practical note, the Department of Finance could be concerned about the potential for overcontributions to a QET. The overcontribution issue could be problematic in those cases where the future reclamation costs could not reasonably be estimated at the time of contribution. As discussed earlier, under the reverse depreciation approach, an immediate deduction of each funding amount (such as a contribution to a reclamation trust) and the tax-free growth of the reclamation income earned thereon are justified only to the extent that the aggregate funding amounts do not exceed the present value of the reclamation costs. It is clear that contributions to a QET in excess of the latter amount (“excess contributions”) should not be allowed to earn a tax-exempt return. However, if the potential making of excess contributions is the government’s main concern in this regard, it does not justify the annual taxation of all of the reclamation income earned in the QET. The potential problem could be alleviated otherwise.

For example, if the department is not satisfied that the industries’ regulatory regimes provide appropriate guidelines regarding contributions, it could enact its own requirements in this regard for income tax purposes, perhaps analogous to those provided under section 468A of the US Code in respect of contributions made to nuclear decommissioning reserve funds.124 Alternatively, the statutory rules could be amended to exempt all of the reclamation income earned in the QET from taxation, but to impose a penalty or additional tax in the year of withdrawal in respect of the withdrawn funds that are not used to pay the reclamation costs; the penalty or additional tax could equal or approximate the amount of tax that would have been payable if the excess contributions had not been deducted and the reclamation income earned on the excess contributions had been subject to taxation. Although such an approach would require calculations based on the amount of excess contributions, when they arose, and the amount and pattern of accrued reclamation income earned thereon up to the year of withdrawal from the QET, such matters might be determined using an assumed rate of return and an assumed funding pattern. For example, in the case of several “funding years,” it might be assumed that the excess contributions were made on a pro rata basis and that they generated the same annual rate of reclamation income.125 Alternatively, an arbitrary tax or penalty could be imposed in respect of the withdrawn funds that are not used for reclamation. A similar approach is currently employed in the case of income withdrawn from a registered education savings plan (RESP) that is not used for

123 See the discussion in the text accompanying notes 24 to 28, supra.
124 See the discussion in the text accompanying notes 45 to 46, supra.
125 For example, assume that the taxpayer in previous example 2—with funding amounts (contributions) being made in years 1 through 5 to ostensibly fund $610 worth of reclamation costs in year 6—ended up spending only $510 on reclamation. The present value of the $100 excess costs ($610 minus $510) could be prorated over years 1 through 5 for the purpose of determining the excess contributions in respect of those years.
educational purposes. A 20 percent penalty tax is levied on the withdrawn income not so used (in addition to regular part I tax) as an arbitrary measure to offset the effect of the previous exemption from tax of the income earned inside the RESP.126

Recent Judicial Developments That May Support Earlier Recognition of Reclamation Obligations

Decisions Relating to the Nature of Contingent Expenses

As discussed earlier, before the introduction of the statutory QET rules, reclamation costs were generally not recognized for income tax purposes until the reclamation year, which was typically the year in which the costs were expended on the reclamation activities. Some taxpayers attempted, without success, to deduct their reclamation costs in taxation years before the reclamation year. These taxpayers argued that once they were under an obligation to reclaim, the reclamation costs were incurred even though they would not actually be spent until the reclamation year. However, the courts consistently denied the deduction of the expenses on the grounds that they were contingent until the reclamation year. Even in those cases where taxpayers appeared to have existing legal obligations to perform the reclamation (albeit in the future), a current deduction of the reclamation costs was denied.127 In these cases, the courts appeared to focus on the uncertainty in respect of the quantum of the future costs that would have to be incurred; it appeared that the courts denied current deductibility on the grounds that an obligation to pay an amount in the future was contingent if the quantum of the payment was uncertain. Unfortunately, the courts did not indicate what degree of certainty as to quantum was required before a liability to pay an amount in the future could be considered absolute rather than contingent. In this regard, on the inclusion side, the courts have generally refrained from including estimated amounts in income. The courts in the inclusion cases have indicated that a taxpayer with an existing legal entitlement to a receipt, the amount of which cannot be ascertained, should include the amount in income only once it is ascertainable or at least sufficiently ascertainable.128 Accordingly, one might assume that an expense is not incurred until the quantum of the expense is ascertainable or at least sufficiently ascertainable.

In recent years, however, and after the introduction of the QET rules, the courts have proved more willing to allow the deduction of estimated costs.129 For example, in the Fédération des Caisses Populaires Desjardins case,130 the taxpayer’s employees

126 Subsection 204.94(2) of the Act.
127 In particular, see the Northwood Pulp and Timber case, supra note 3, and the Burnco case, supra note 93.
128 MNR v. Benaby Realty Limited, 67 DTC 5275 (SCC); and West Kootenay Power and Light Company Limited v. The Queen, 92 DTC 6023 (FCA).
129 One notable exception is the Northwood Pulp and Timber case, supra note 3.
130 Fédération des Caisses Populaires Desjardins v. The Queen, 2001 DTC 5173 (FCA).
earned their vacations and resulting vacation pay in the taxation year ("the earning year") before the two years in which the vacations were taken ("vacation years"). In the earning year, the taxpayer deducted certain payroll contributions in respect of the vacation pay, even though the taxpayer was not required to pay the contributions or the vacation pay until the vacation years. Nonetheless, the Federal Court of Appeal allowed the deduction, holding that, pursuant to the relevant federal and provincial legislation, the employer’s legal obligation to make the payroll contributions arose in the earning year as the vacation pay was earned. The court allowed the deduction even though both the vacation pay and the payroll contributions were based on estimates, using the taxpayer’s current payroll information and the current payroll plan rates. The information that was required to compute those amounts with certainty—namely, the payroll and plan rates in the vacation years—was not known in the earning year. Unfortunately, although the Federal Court of Appeal allowed the deduction of the estimated amounts, it did not comment on the relative certainty that was required in this regard. Moreover, it is difficult to compare the degree of certainty in the case—that is, the reliability of the taxpayer’s estimated future payroll contributions—with the reliability of estimated future costs in a typical reclamation case.

In the *Wawang Forest Products* case,\(^{131}\) the taxpayer was a lumber company that attempted to deduct certain “holdbacks” in respect of logging work performed by its contractors. Such amounts were “held back” in case the contractors failed to fulfill their obligations under the Workers’ Compensation Act of Ontario. Under that Act, the taxpayer had a duty to see that the contractors made their statutory contributions; if the contributions were not made, the taxpayer was liable to pay such amounts. In order to protect itself from this eventuality, the taxpayer retained the holdbacks, which represented a certain percentage of the contractor’s compensation for the logging work already completed. The holdbacks were released and paid to the contractors upon their presentation of a clearance certificate issued by the Workers’ Compensation Board, which indicated that the contractors’ statutory obligations had been met. The Federal Court of Appeal held in favour of the taxpayer and allowed the deduction of the holdbacks in the year in which the logging work was completed, reversing the Tax Court of Canada’s finding that the amounts were deductible only when the clearance certificate was presented. On the basis of its review of the Workers’ Compensation Act and the contracts between the taxpayer and the contractors, the Federal Court of Appeal found that the taxpayer’s obligation to pay the cost of the logging work, including the holdbacks, became absolute upon the completion of the work. The court held that the presentation of the clearance certificate was not a condition precedent to the taxpayer’s liability to pay the holdbacks. In reaching its conclusion, the court confirmed that the appropriate approach for determining whether a liability is contingent is found in the test enunciated by Lord Guest of the House of Lords in the *Winter* decision:

\[^{131}\] *Wawang Forest Products Limited et al. v. The Queen*, 2001 DTC 5212 (FCA).
I should define a contingency as an event which may or may not occur and a contingent liability as a liability which depends for its existence upon an event which may or may not happen.132

The Federal Court of Appeal went on to consider the use of the Winter test by the Tax Court judge in the Samuel F. Investments case,133 one of the cases cited by the Crown in the case at hand. In Samuel F. Investments, the Tax Court judge interpreted the Winter test as follows:

My understanding is that a liability to make a payment is contingent if the terms of its creation include uncertainty in respect of any of these three things: (1) whether the payment will be made; (2) the amount payable; or (3) the time by which payment shall be made.134

The Federal Court of Appeal in Wawang Forest disagreed and held that this statement was not an accurate description of the law. The court held that the “three uncertainties” were not necessarily indicative of the existence or non-existence of a contingent liability. For example, the court held that future uncertainty as to the quantum of an otherwise legally binding obligation or the timing of its payment would not, in itself, preclude the current deduction of the amount:

The “three uncertainties” listed in Samuel F. Investments cannot by themselves determine whether a liability is contingent. For example, with respect to the uncertainty as to payment, a taxpayer may incur an obligation at a time when it is in financial difficulty, with the result that there is a significant risk of non-payment. But that uncertainty cannot mean that the obligation was never incurred. Similarly, an obligation to pay a certain amount does not become a contingent obligation merely because events may occur that result in a reduction in the quantum of the liability (see, for example, Canadian Pacific, cited above). Nor does a legal obligation to pay an amount become contingent merely because payment may be postponed in certain events or no date is stipulated for payment. Parties are entitled to rely on the ordinary contract law principle that payment for services must be made within a reasonable time.

Returning to the Winter test, the correct question to ask, in determining whether a legal obligation is contingent at a particular point in time, is whether the legal obligation has come into existence at that time, or whether no obligation will come into existence until the occurrence of an event that may not occur.135

On the basis of the Winter test as approved by the Federal Court of Appeal in Wawang Forest, one might argue that reclamation costs should be deductible once a

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133 Samuel F. Investments Limited v. MNR, 88 DTC 1106 (TCC).
134 Ibid., at 1108.
135 Supra note 131, at 5215-16.
taxpayer is under a legal obligation to reclaim (and therefore to expend the reclamation costs). Furthermore, on the basis of the court’s rejection of the “three uncertainties” in the Samuel F. Investments case, it appears that uncertainty over the quantum or timing of the payment of the reclamation costs would not, in itself, prevent a current deduction on account of the costs. On the other hand, unlike the liability to pay future reclamation costs, the liability at issue in the Wawang Forest case related to logging services already rendered. Therefore, a distinction might be made between amounts owing by a taxpayer on account of services already performed and amounts that the taxpayer will be required to expend on reclamation to be performed in the future. In this regard, the court in Wawang Forest made the following observation on the Northwood Pulp and Timber decision (discussed earlier) as it related to the case at hand:

The Crown also relies on Northwood Pulp and Timber Limited. . . . The issue in Northwood was whether a taxpayer who had a statutory obligation to complete certain silviculture work could add the estimated cost of the work to the cost of its inventory of harvested logs before the work was done or even contracted for. The Court held that the cost of silviculture was not an inventory cost but a running expense, and that as a running expense it could not possibly be incurred before the work was done. That case is quite unlike this one, in which the amounts sought to be deducted in each year were consideration for work actually completed in those years [emphasis added].

The Canadian Pacific decision appears, on its face, to expand the deductibility of estimated liabilities and to provide some authority for the proposition that the deduction of reclamation expenses for income tax purposes should coincide with the GAAP treatment, which would allow the costs to be deducted during the relevant income-earning period and before the reclamation year. (As discussed earlier, the current GAAP treatment of reclamation costs is similar to the reverse depreciation approach.) In Canadian Pacific, the taxpayer was required to reimburse the Workmen’s Compensation Board (WCB) for disability awards made to the taxpayer’s permanently disabled workers. Typically, a disability award provided a worker with monthly payments for life. Although the monthly amounts were stipulated at the time of the award, the total amount of each award was not known with certainty because it was payable for the duration of the worker’s lifetime. Nonetheless, upon the receipt of the notice of an award from the WCB, the taxpayer estimated its total liability in respect of the award by projecting the stipulated monthly amount of the award over the life expectancy of the disabled worker (based on actuarial information). The total amount was then credited to a notional account and was deducted in full for income tax purposes in the year in which the award was made.

136 Ibid., at 5218.
137 Canadian Pacific Limited v. The Minister of Revenue (Ontario), 99 DTC 5286 (Ont. CA).
138 See above under the heading “Overview of GAAP, the Common Law Principles, and the Statutory Response”; see also appendix 2 at the end of this article.
Although the taxpayer’s method of deducting the awards was in accordance with GAAP, the minister of revenue (Ontario) argued that the method was inappropriate for income tax purposes. The minister argued that the “account” set up by the taxpayer to fund the future payments of the awards constituted a contingent account, the deduction of which was prohibited under former paragraph 18(1)(e) of the Act.\textsuperscript{139} Apparently, the minister conceded that the awards would have been deductible but for paragraph 18(1)(e), so that no other provisions of the Act were specifically at issue in the case.\textsuperscript{140}

The Ontario Court of Appeal held in favour of the taxpayer, holding that the account was not a contingent account within the meaning of former paragraph 18(1)(e). In reaching its conclusion, the court relied on the Supreme Court of Canada decision in the \textit{Time Motors} case,\textsuperscript{141} where it was held that the predecessor to former paragraph 18(1)(e) was to be construed by reference to the proper accounting practice. The court therefore concluded that former paragraph 18(1)(e) precluded the deduction of amounts that were contingent for accounting purposes. The court found that, according to the proper accounting practice, the fact that an estimate was involved did not, in itself, lead to a finding that an amount was contingent. The court was also satisfied that there was reasonably sufficient certainty in respect of the amount of each award at the time the taxpayer claimed the deduction:

Moreover, as I have stated, the decision in \textit{Time Motors} holds that s. 18(1)(e) of the \textit{Income Tax Act} is to be construed by reference to proper accounting practice in the business being conducted. . . .

[I]t is clear, according to proper accounting practice, that the fact that an estimate is involved will not, in itself, lead to a finding that an account is contingent within the meaning of s. 18(1)(e). . . .

[W]here a taxpayer has incurred a liability in a taxation year, and has placed money into an account to enable it to fulfill the liability, uncertainties surrounding the amount which will ultimately be paid will not per se result in the liabilities being classed as contingent, nor the account being classed as a contingent account. In this appeal, I would hold that CP’s Deferred Liabilities—Workmen’s Compensation account was not a contingent account within the meaning of s. 18(1)(e), notwithstanding the lack of complete certainty as to the amount which CP would ultimately have to pay to disabled workers. In my view, although the amount of the award may vary due to the premature death of a worker, a cost of living increase, or an improvement in the condition of a disabled worker, there was reasonably sufficient certainty in respect to the amount of the award at the time of its inclusion in the account. Any change in the amount arising as a result of these factors, generally

\textsuperscript{139} The federal provision was incorporated by reference for provincial purposes under the Ontario Corporations Tax Act.

\textsuperscript{140} However, the court did find that the taxpayer’s method of reporting the awards provided an accurate picture of the taxpayer’s profit, so that it indirectly addressed section 9 in this regard; see \textit{Canadian Pacific}, supra note 137, at 5296. See also infra note 148.

\textsuperscript{141} \textit{Time Motors Ltd. v. MNR}, 69 DTC 5149 (SCC).
speaking, should be relatively inconsequential, and is easily and adequately accounted for by prompt and proper accounting entries at the relevant time [emphasis added].

As noted, the *Canadian Pacific* decision appears to broaden the scope of the deductibility of estimated liabilities, and it could prove beneficial for taxpayers attempting to deduct reclamation costs before the reclamation year. Arguably, on the basis of the *Canadian Pacific* rationale, reclamation costs could be deducted in accordance with the GAAP treatment if there was “reasonably sufficient certainty in respect to the amount” of the costs that would ultimately be paid. As one commentator has noted,

[the *Canadian Pacific* judgment arguably established a simple test based on the distinction between the fact of liability and the quantum of liability. A liability is arguably only contingent when its fact is uncertain, not when only its quantum may vary because of subsequent events.]

The CRA has agreed that the *Canadian Pacific* decision establishes that the fact that the amount of a liability must be estimated does not make the liability a contingent one. However, the CRA has not expressly overturned its previous administrative positions on the deductibility of future reclamation costs, in which it held that reclamation costs were generally recognized only in the reclamation year.

Interestingly, the liability to pay workers’ compensation awards (as in the *Canadian Pacific* case) is conceptually similar to a liability to pay future reclamation costs. In either situation, there exists a current obligation to pay an amount in the future that is necessary to the earning of income in the present, and that arguably will generate little or no income or other benefit when the payment is made. Therefore, assuming that one gets over the contingent liability hurdle, it could be argued in either case that the current recognition of the obligation (when the obligation arises) would provide a more accurate picture of the taxpayer’s income relative to the deferred recognition of the costs in the year in which they are actually paid (for example, the reclamation year). The court in *Canadian Pacific* made such a

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142 *Canadian Pacific*, supra note 137, at 5294-95.
145 Supra note 92.
146 For this reason, some American commentators have suggested that the reverse depreciation approach (that is, allowing so-called funding amounts to earn tax-exempt income) could also apply to future payment obligations arising under workers’ compensation law and tort claims. See Butler, supra note 7, at 159-62; and Halperin, “Interest in Disguise,” supra note 13, at 526-27.
147 In *Canderel*, supra note 100, the Supreme Court of Canada held that in ascertaining a taxpayer’s profit, the goal is to obtain an accurate picture of the taxpayer’s profit for the given year, and
finding, holding that the current deduction of the compensation awards provided an accurate picture of the taxpayer’s income position, and that the Crown did not establish that there was another method that more accurately reflected that income position.\textsuperscript{148} Thus, in terms of the accurate picture concept, the court’s resolution of the timing issue may have been justified. However, the court’s finding with respect to the amount of the deduction clearly was not—the taxpayer was allowed an immediate deduction equal to the face amount of the aggregate disability payments awarded to its workers.\textsuperscript{149} In order to account for the liability properly, the current deduction should have been limited to the discounted present value of such payments.\textsuperscript{150} The absurdity of the Canadian Pacific decision becomes readily apparent once the time value of money is taken into account; the current deduction of the face amount of a payment that is not owed for several years can transform a significant before-tax liability into a significant after-tax asset. For example, if a taxpayer is allowed to fully deduct the face amount of a $1,000 reclamation cost to be paid in 20 years on a current basis, the $500 of tax savings generated by the current deduction (assuming a 50 percent rate of tax) will grow to $1,327 in 20 years after

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\item that the taxpayer is free to adopt any method that is not inconsistent with the provisions of the Income Tax Act, established case law principles, and well-accepted business principles. Once the taxpayer has shown that he has provided an accurate picture of income for the year, which is consistent with the Act, the case law, and well-accepted business principles, the onus shifts to the minister to show either that the figure provided does not represent an accurate picture, or that another method of computation would provide a more accurate picture.
\item In Canadian Pacific, supra note 137, at 5296, the court made the following comment in respect of the “accurate picture” test enunciated by the Supreme of Canada in Canderel: “In my view, the quest for the more accurate picture of the appellant’s income leads to the conclusion that the deduction of the totality of the payments made to its account in the year in which the award of the Workmen’s Compensation Board was made provides that picture. To the appellant, who stood to receive no corresponding benefit from the payment in years subsequent to that in which the award was made, the liability imposed by the Workmen’s Compensation Act represented a very real liability in its current financial statements. Moreover, deducting the expense at that point was consistent with the well-established principle that expenses should be recognized in the same period as the revenue to which they relate [emphasis added].”
\item The court provided the following example as to how the taxpayer set up its “account” of the compensation awards, ibid., at 5288: “For example, suppose the Board awarded a permanently disabled worker, whose life expectancy was 25 years, permanent disability of $500 per month effective January 1, 1981. CP would calculate that it would be liable to the Board for $150,000 over the life expectancy of the worker, add this amount to the account and charge it as an expense against income for 1981. When invoiced by the Board on a monthly basis for the payments it made to the worker, CP would reimburse the Board. In this example, CP would have reimbursed the Board for $6,000 in 1981.”
\item In order to replicate, in economic terms, a deduction made in the year of payment, the current deduction should have been limited to the present value of the payment using the appropriate after-tax discount rate. See the discussion in the text accompanying notes 46 to 48, supra. If the before-tax discount rate were used in this regard, the taxpayer would be worse off relative to a deduction in the year of payment unless, as under the reverse depreciation approach, the taxpayer was also allowed a deduction on account of imputed interest up to the year of payment.
\end{itemize}
tax (5 percent annual return after tax), leaving the taxpayer with an after-tax profit of $327 even though it has a $1,000 before-tax liability. Therefore, if future courts follow the Canadian Pacific decision and allow taxpayers to deduct future reclamation costs (or workers’ compensation awards) on a current basis, they should properly account for the time value of money. Clearly, the failure to do so will greatly distort the taxpayers’ income positions.

The foregoing points may end up being moot in any event. That is, at least in my view, Canadian Pacific should have limited precedential value in terms of the relevance of GAAP and whether a liability or amount is contingent. (I therefore find it surprising that the CRA has accepted the analysis in the decision.)\textsuperscript{151} Although the court correctly noted that the Supreme Court of Canada in Time Motors found that the predecessor provision to former paragraph 18(1)(e) referred to accounting practice, the Supreme Court’s finding was premised on its observation that the applicable phrase was “contingent account” (which it viewed as an accounting term) rather than “contingent liability” (which it apparently viewed as a legal term).\textsuperscript{152} (Former paragraph 18(1)(e), the provision at issue in Canadian Pacific, similarly referred to a “contingent account.”) Paragraph 18(1)(e) has been amended and now refers to a “contingent liability or amount.” More significantly, the Supreme Court in Time Motors first found that the taxpayer had, as a matter of law, a subsisting and enforceable obligation to pay the amounts at issue.\textsuperscript{153} Having found that a deduction was allowable under general principles, the Supreme Court then turned to the issue of whether the deduction was specifically prohibited under the predecessor to former paragraph 18(1)(e). In this regard, it is significant that the Federal Court of Appeal in the Newfoundland Light & Power case\textsuperscript{154} held that certain holdbacks were not deductible even though, on the basis of the accounting treatment, they did not constitute amounts credited to a contingent account for the purposes of former paragraph 18(1)(e). The majority of the Federal Court of Appeal held that the holdbacks were contingent as a matter of law, and therefore, that they did not constitute outlays or expenses made or incurred for the purposes of paragraph 18(1)(a). Accordingly, former paragraph 18(1)(e) and the interpretation given to the predecessor provision by the Supreme Court in Time Motors was found to have no relevance or application to the decision. Pratte JA of the majority held as follows:

At the hearing, the appellant’s main submission was that Mr. Justice Martin, instead of viewing the problem in a purely legalistic way, as had been done in Guay and Colford, should have adopted a more realistic approach and, following the decision of

\textsuperscript{151} Supra note 144.

\textsuperscript{152} Time Motors, supra note 141, at 5151: “The only expression applicable to the present case is not ‘contingent liability’ but ‘contingent account.’ This means that the provision is to be construed by reference to proper accounting practice in a business of the kind with which one is concerned.”

\textsuperscript{153} Ibid., at 5150-51.

\textsuperscript{154} Newfoundland Light & Power Co. Ltd. v. The Queen, 90 DTC 6166 (FCA).
the Supreme Court of Canada in *Time Motors Limited v. M.N.R.*, decided the case in the light of the Generally Accepted Accounting Principles which apparently teach that an expense or cost may have been incurred even though the legal obligation to pay that expense or cost does not yet exist. This argument must, in my view, be rejected. The *Time Motors* decision is not relevant. The Court held, in that case, that the obligation of the taxpayer under certain credit notes was “subsisting until satisfied or expired.” It reached that conclusion without the help of accounting principles. It made reference to those principles for the sole purpose of determining the meaning to be given to the expression “contingent account” in paragraph 18(1)(e) of the Act, a provision which has no application here.155

On a more general level, it is difficult to rationalize the continued reference in paragraph 18(1)(e) to an amount as or on account of a “reserve” or a “sinking fund.” These terms appear to refer to amounts set aside or deducted as such for financial accounting purposes.156 Surely, whether amounts are set up as reserves (or anything else) for accounting purposes should be irrelevant for income tax purposes; the sole issue should be whether the liability to pay the amounts is contingent. Although amounts set up as reserves would often be considered contingent liabilities at law in any event, it is conceivable that under certain circumstances they would not be contingent at law. Accordingly, there is the possibility that an amount set up as a reserve or sinking fund for accounting purposes would not be deductible for income tax purposes by virtue of paragraph 18(1)(e), even if it was found to be an existing and non-contingent liability as a matter of law.157 In the converse scenario, where an amount was not set up as a reserve or sinking fund for accounting purposes, but it was a contingent amount or liability as a matter of law, the amount would not be deductible for income tax purposes, as the *Newfoundland Light & Power* decision clearly indicates. Paragraph 18(1)(e) should be amended to refer only to contingent amounts or liabilities, or it should be repealed.

On a final note, even if one gets over the contingent obligation hurdle and it is shown that a taxpayer has incurred costs—that is, the taxpayer has an existing legal obligation to pay reclamation costs although payment will occur in the future—it is

155 Ibid., at 6173. The other majority judge, Desjardins JA, similarly concluded, at 6172, that the holdbacks were contingent as a legal matter and therefore “could not be deducted under paragraph 18(1)(a) of the Act. Paragraph 18(1)(e) should not be referred to since it has no application in this case.”

156 As noted earlier, in *Time Motors*, supra note 141, the Supreme Court found that the predecessor to former paragraph 18(1)(e) referred to accounting practice. The predecessor provision contained the references to “sinking fund” and “reserve,” similar to current paragraph 18(1)(e).

157 Presumably, in this circumstance, one would make the argument that although a reserve or sinking fund was set up for accounting purposes, it was not set up as a matter of law for income tax purposes and therefore the restriction in paragraph 18(1)(e) would not apply (but see supra note 156 regarding the *Time Motors* decision). Note also that a deduction on account of a reserve or sinking fund would be allowed if it were expressly permitted under the Act; see, for example, the deductions for reserves under paragraphs 20(1)(l) through (p).
possible that a current deduction would be prohibited under the “prepayment” provisions of subsection 18(9). That is, in addition to applying to prepayments, subsection 18(9) applies to any outlay or expense to the extent that it can reasonably be regarded as having been incurred as consideration for services to be rendered in a future taxation year; the current deduction of the outlay is prohibited and its deduction is deferred to the future year (more precisely, to the year to which it can reasonably be considered to relate). Thus, to the extent that reclamation costs could reasonably be regarded as consideration for future reclamation “services,” any deduction on account of the costs would be deferred to the reclamation year. However, it is questionable whether subsection 18(9) would apply if the taxpayer planned to perform the reclamation itself. Furthermore, even if the taxpayer planned to hire a third party to carry out the reclamation, it is questionable whether the current obligation to pay in the future would constitute “consideration” for services for the purposes of subsection 18(9). “Consideration” implies the existence of something given or promised by one party to another party in return for something given or promised by the other party. In the context of a taxpayer’s existing obligation to reclaim in the future, unless the other party (the reclamation service provider) was known and under contract to render the reclamation services to or on behalf of the taxpayer, the taxpayer’s existing obligation arguably could not reasonably be regarded as having been incurred as consideration for those services.

Decisions Relating to the Inclusion of Unearned Income
As discussed earlier, in the Pedersen case, the taxpayer operated a waste landfill site and argued that a portion of the landfill fees that it collected from its customers during the site’s operating phase was targeted toward the reclamation of the site in its closed phase, even though this fact was not explicitly set out in the contracts with the customers or under the terms of the taxpayer’s operating licence. Accordingly, the taxpayer argued that this portion of the fees was on account of future reclamation services and included in income under paragraph 12(1)(a), which includes amounts received in a taxation year on account of services to be rendered after the end of the year. The taxpayer further argued that this portion was eligible for the paragraph 20(1)(m) reserve, which allows a deduction of the amounts included under paragraph 12(1)(a) on account of the services yet to be rendered. Effectively, this treatment would have allowed the taxpayer to defer the inclusion of this portion to the years in which the reclamation costs were incurred (the reclamation years). However, the court held against the taxpayer on this point and disallowed the deduction of the reserve. The court held that the contracts between the taxpayer and its customers provided that the fees were paid in consideration for the collection of the customers’ waste only, and that there was no evidence in the case that

158 Arguably, the provision could apply to the extent that the reclamation costs related to future reclamation “services” to be performed by the taxpayer’s employees.

159 Supra note 4.
suggested that a portion of the fees was on account of the future reclamation services. The court noted that the reclamation services provided during the closed phase were not services provided to the customers.

The court in Pedersen likely reached the right conclusion on this issue. The customers of a taxpayer that operates a mine or a waste landfill site cannot reasonably be viewed as prepaying for future reclamation services required on the site. When customers make their purchases from the taxpayer, their payments are simply consideration for the goods or services that are received concurrently from the taxpayer (the products from the mine or the collection of waste in the landfill site); the payments are not made as consideration for the future reclamation services, which obviously are not rendered to the customers. Taxpayers that sell goods or render services often pass on their own costs incurred in respect of other services by incorporating those costs into the prices of their own goods or services. For example, a taxpayer that anticipates higher service costs in the upcoming taxation year might incorporate some of those costs into the price of its products sold in its current taxation year. It is highly unlikely that the paragraph 20(1)(m) reserve mechanism is intended to apply in such circumstances to allow the taxpayer to carve out a portion of the sales price of its products sold currently, on the grounds that the portion is on account of future services to be provided to the taxpayer.

Interestingly, however, in the more recent Meloche case, the taxpayer was allowed to claim the reserve in similar circumstances for Quebec provincial income tax purposes. The taxpayer operated a waste landfill site and was obligated under the Environment Quality Act (Quebec) to ensure that reclamation was performed on the site for 30 years after it was closed down. Pursuant to that Act, the Quebec Ministry of Environment set the fees that the taxpayer was entitled to charge its customers for the collection of waste. The fees were set expressly by reference to both the current waste collection services and the post-closure reclamation services. Accordingly, a portion of the fees was intended to fund the reclamation services (similar to the “funding amounts” described earlier in this article), although it is unlikely that the portion could be viewed as consideration paid by the taxpayer’s customers for those services. Nonetheless, the Quebec Court of Appeal, in affirming the decision of the trial court judge, held that the portion of the fees that related to the reclamation services was on account of those future services, and that it was not earned upon receipt. The court reasoned that the taxpayer was obligated to incur reclamation costs after the site was closed, and that this portion of the fees was intended to meet those costs. Accordingly, such portion was included in the taxpayer’s income for Quebec income tax purposes pursuant to the provincial statutory equivalent to paragraph 12(1)(a) of the Act, and it was eligible for the reserve under the provincial equivalent to paragraph 20(1)(m) of the Act. As a result, the taxpayer was allowed

160 Supra note 4.

161 Sections 87(a)(i) and 150, respectively, of the Taxation Act (Quebec), RSQ, c. I-3.
to defer the recognition of the portion of its fees representing the reclamation services to the years in which those services were carried out (the reclamation years).

The Meloche and Pedersen decisions appear to be distinguishable on their facts. In the Pederson case, neither the regulatory system nor the taxpayer’s contracts with its customers provided that the waste collection fees were to be applied toward the reclamation. In contrast, in the Meloche case, the relevant authorities expressly determined that a portion of the fees collected by the taxpayer was required to meet the taxpayer’s reclamation obligations. The CRA has stated that the decisions can be distinguished on their facts in this manner, and that it will allow the reserve to be claimed in fact situations similar to that in Meloche where it is possible to identify the portion of current revenues received that relate to the future reclamation. Accordingly, it appears that as long as a taxpayer is required or allowed to charge its customers a clearly identifiable “funding amount” for the purpose of funding future reclamation, such amount will be eligible for the paragraph 20(1)(m) reserve, and therefore its inclusion can be deferred to the reclamation year. Interestingly, it can be shown that the effect of such a deferral is to exempt from taxation the simple portion (but not the compound portion) of the reclamation income earned on the funding amount up to the reclamation year. Therefore, the paragraph 20(1)(m) treatment is less favourable than the reverse depreciation approach, which would exempt all of this reclamation income from taxation, although the paragraph 20(1)(m) treatment is more favourable than the common law deferral approach and the QET statutory approach, which subject all of the reclamation income to taxation. This apparent inconsistency in the statutory treatment of funding amounts (the QET rules versus the paragraph 20(1)(m) reserve treatment) is obviously not warranted and should be addressed.

CONCLUSION

In this article, it was argued that the reverse depreciation approach (or a similar environmental RRSP approach) should apply to negative salvage value reclamation.

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162 CRA document no. 9532845, April 12, 1996. Both this CRA document and the Meloche decision were provided in French only, and, since I am regrettably not bilingual, I have relied on unofficial translations of the document and the decision in providing the analysis herein. Nonetheless, I take full responsibility for any misrepresentation of the facts or the findings in the document or the decision.

163 The simple portion refers to the reclamation income earned on the funding amount itself, rather than the reclamation income earned on previously earned reclamation income; in other words, it is analogous to simple interest.

164 The compound portion refers to the reclamation income earned on previously earned reclamation income; it is analogous to compound interest.


166 I call the inconsistency “apparent” because it is not clear whether the Quebec Court of Appeal’s decision in Meloche will be followed by the federal courts for federal income tax purposes.
obligations. The deferral approach that applies under general principles and that is replicated in economic terms under the QET statutory regime understates the value of reclamation obligations and overtaxes the income required to fund the reclamation. Accordingly, taxpayers in the affected industries face a greater tax burden relative to taxpayers in other industries where reclamation is not required and costs are recognized properly for income tax purposes. This state of affairs is peculiar, considering that the reclamation of property is typically beneficial, and, if anything, it should be encouraged rather than discouraged. At the very least, taxpayers should not be penalized by way of an incorrect tax burden for undertaking reclamation obligations in the course of their business activities.

Assuming that the Department of Finance and the affected industries can agree on the types of reclamation that typically reflect negative salvage value, a reverse depreciation approach should be adopted for the corresponding reclamation obligations. Furthermore, some form of reverse depreciation could be justified even in the positive salvage value cases where the reclaimed property is land, owing to the fact that a regular depreciation deduction is not available.

APPENDIX 1: REVERSE DEPRECIATION OF RECLAMATION COSTS COMBINED WITH ECONOMIC DEPRECIATION OF REGULAR CAPITAL COSTS

Economic Depreciation

In order to ensure that a taxpayer’s income is reported as accurately as possible, the deduction of the cost of each asset used by the taxpayer for the purpose of earning the income should exactly coincide with the decline in the value of the asset; this treatment is commonly referred to as “economic depreciation.” For this reason and the related reason that the main purpose of depreciation is to reflect the losses in the values of assets, it is generally agreed that economic depreciation would be the most appropriate method of accounting for capital costs. Paul Samuelson proved 40 years ago that economic depreciation would be the only truly neutral method of depreciation because its implementation would result in the prices of all assets being independent of investors’ tax rates. Stated another way, it would ensure that investors’ effective rates of tax would always equal their nominal rates of tax in respect of all forms of capital income. In more formalistic terms,

167 Samuelson, supra note 25.


169 Samuelson, supra note 25.

170 This proposition assumes that the income itself (for example, the revenues generated by the assets) was fully subject to taxation. For example, if the revenues from an asset were taxed preferentially, investors’ effective rates of tax would typically not equal their nominal rates of tax.
economic depreciation would ensure that the after-tax internal rate of return (IRR) generated from an asset would equal the before-tax IRR multiplied by \((1 - t)\), where \(t\) equals the investor’s rate of tax. Economic depreciation will be illustrated using the following example.

**Example 3**

At the end of year 0, a taxpayer purchases an asset for $379. The asset will generate $100 in cash revenues at the end of each of years 1 through 5, after which the asset will be worthless. Under this pattern of cash flows, the asset will generate for the taxpayer a before-tax IRR of 10 percent per annum.\(^{171}\) The appropriate discount rate is also 10 percent per annum (thus, the value of the asset, $379, equals the present value of the cash revenues.)\(^{172}\) The taxpayer is in a 50 percent tax bracket at all times.

As each year goes by, the taxpayer in example 3 will have one fewer cash receipt and, accordingly, will sustain an economic loss in that year. At the same time, the taxpayer will enjoy an accretion to wealth in the year equal to the accrued increase in the present value of all of the future cash receipts over the course of that year. Therefore, in total, the taxpayer will sustain a net passage-of-time loss in each year equal to the change in the present value of future cash revenues as measured from the end of the previous year. For example, the taxpayer’s loss in year 1 will be $62, equal to the present value of all future cash receipts at the end of year 0 ($379) minus the present value of all future cash receipts at the end of year 1 ($317).\(^{173}\) Similarly, for year 2, the taxpayer’s loss will be $68, equal to the present value of all future cash receipts at the end of year 1 ($317) minus the present value of all future cash receipts at the end of year 2 ($249). A similar computation can be made for years 3 through 5, and the resulting economic depreciation schedule would allow deductions of $62, $68, $75, $83, and $91 in years 1 through 5, respectively; this pattern of increasing deductions is sometimes referred to as “sinking fund” or “annuity-type” depreciation. After deducting such amounts in years 1 through 5 from the $100 cash revenues, the taxpayer would report net income of $38, $32, $25, $17, and $9 in those respective years.

As noted, the asset in example 3 will generate a before-tax IRR of 10 percent per annum. Therefore, if the taxpayer’s income is reported correctly, the after-tax IRR will equal 5 percent per annum (owing to the fact that the taxpayer is in a 50 percent tax bracket).

\(^{171}\) That is, using a 10 percent annual discount rate, the net present value of the cash flows will equal nil; stated another way, the cost of the asset (an outgoing cash flow) will equal the present value of all cash revenues (the incoming cash flows).

\(^{172}\) Supra note 171.

\(^{173}\) Stated another way, the expected loss in year 1 equals the $100 cash receipt (which will no longer form part of the asset) net of the $38 accrued increase in the present value of all of the cash receipts from the end of year 0 to the end of year 1, or $62.
The taxpayer’s resulting income, tax, and cash flows in each of years 0 through 5 are summarized below.

**Economic depreciation applied to example 3**

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before-tax cash</td>
<td>−379</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Income</td>
<td>nil</td>
<td>38</td>
<td>32</td>
<td>25</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Tax payable</td>
<td>nil</td>
<td>−19</td>
<td>−16</td>
<td>−12</td>
<td>−9</td>
<td>−4</td>
</tr>
<tr>
<td>After-tax cash</td>
<td>−379</td>
<td>81</td>
<td>84</td>
<td>88</td>
<td>91</td>
<td>96</td>
</tr>
</tbody>
</table>

*a* After-tax cash equals before-tax cash minus tax payable.

As expected, the foregoing pattern of after-tax cash flows would generate an after-tax IRR of 5 percent per annum.175

**Economic Depreciation Plus Reverse Depreciation**

As noted earlier in the article, reverse depreciation is essentially a form of economic depreciation except that it applies in respect of costs that are incurred at the end of the income-earning process rather than the beginning of the process. Accordingly, a taxpayer’s income position over that period of time should be measured correctly if reverse depreciation is applied to the taxpayer’s reclamation costs and economic depreciation is applied to the taxpayer’s regular depreciable capital investments (its capital investments made at the beginning of the income-earning process). Consider, for instance, the following example, which is identical to previous example 2 in the text in terms of the reclamation obligation, although it also takes into account the taxpayer’s capital investment at the beginning of the income-earning process, which is identical to the capital investment in example 3 above.

**Example 4**

The taxpayer begins to carry on a business at the end of year 0, which requires the taxpayer to expend reclamation costs at the end of year 5. The reclamation costs will equal $610 (present value of $379). The taxpayer charges and receives from its customers funding amounts of $100 at the end of each of years 1 through 5 (also with a present value of $379). With a 10 percent annual rate of return, the funding amounts

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174 That is, using the 5 percent after-tax annual discount rate, the net present value of the cash flows should equal nil; therefore, the after-tax present value of all outgoing cash flows should equal the present value of all incoming cash flows.

175 The result is verified by computing the present value of the future cash flows using the after-tax discount rate of 5 percent. The present value of the after-tax cash flows in each of years 1 through 5, respectively, equals $77, $76, $76, $75, and $75, for a total of $379; this amount equals the $379 cost of the asset. Therefore, using the 5 percent discount rate, the net present value of all of the cash flows equals nil.
will grow to $610 by the end of year 5. The taxpayer’s initial capital investment (at the end of year 0) in respect of the business was $379. With a 10 percent annual rate of return and a five-year investment period, this $379 investment will generate revenues of $100 in each of years 1 through 5, after which it will be worth nil. Therefore, when these revenues are combined with the funding amounts (also $100 per year), the taxpayer will receive $200 in each of years 1 through 5.

On a before-tax basis, the pattern of cash flows in example 4 will generate an IRR of 10 percent per annum. Therefore, if the taxpayer’s income is reported correctly, on an after-tax basis, the IRR should equal 5 percent per annum.

If economic depreciation is applied to the taxpayer’s initial investment of $379, the taxpayer will deduct $62, $68, $75, $83, and $91 in respect of that investment in years 1 through 5, respectively (see example 3 above). As illustrated earlier in the article, if reverse depreciation is applied to the taxpayer’s $610 reclamation costs, the taxpayer will deduct $100, $110, $121, $133, and $146 in respect of such costs in years 1 through 5, respectively. Therefore, if both economic depreciation and reverse depreciation are applied, the taxpayer will have aggregate deductions of $162, $178, $196, $216, and $237 in years 1 through 5, respectively. Therefore, if both economic depreciation and reverse depreciation are applied, the taxpayer will have aggregate deductions of $162, $178, $196, $216, and $237 in years 1 through 5, respectively, leaving the taxpayer with net income (or loss) of $38, $22, $4, ($16), and ($37) in each of those years (that is, $200 minus each of the aggregate deductions). The taxpayer’s resulting income, tax, and cash flows in each of years 0 through 5 are summarized below.

### Economic depreciation and reverse depreciation applied to example 4

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before-tax cash</td>
<td>...</td>
<td>-379</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>-410a</td>
</tr>
<tr>
<td>Income (loss)</td>
<td>...</td>
<td>nil</td>
<td>38</td>
<td>22</td>
<td>4</td>
<td>(16)</td>
</tr>
<tr>
<td>Tax payable (-) or tax savings (+)</td>
<td>...</td>
<td>nil</td>
<td>-19</td>
<td>-11</td>
<td>-2</td>
<td>+8</td>
</tr>
<tr>
<td>After-tax cashb</td>
<td>...</td>
<td>-379</td>
<td>181</td>
<td>189</td>
<td>198</td>
<td>208</td>
</tr>
</tbody>
</table>

a Outlay of $610 (reclamation costs) net of the $200 amount received in year 5.
b After-tax cash equals before-tax cash minus tax payable or plus tax savings.

As expected, this pattern of after-tax cash flows will generate for the taxpayer an after-tax IRR of 5 percent per annum.

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176  A 10 percent annual discount rate makes the net present value of the cash flows equal to zero.
177  Supra note 174.
178  See previous example 2 and accompanying text.
179  This result is verified by computing the present value of the future cash flows using the after-tax discount rate of 5 percent. The present value of the net after-tax cash flows in each of years 1 through 5, respectively, equals $172, $171, $171, $171, and $306, for a total of $379; this amount equals the $379 cash flow in year 0 representing the initial investment.
APPENDIX 2: GAAP TREATMENT OF RECLAMATION COSTS

Effective for fiscal periods that begin after 2003, section 3110 of the *CICA Handbook* establishes standards for the recognition and measurement of a firm’s obligation to reclaim property, referred to as an “asset retirement obligation” (ARO). Interestingly, the approach under section 3110 is similar to the reverse depreciation approach. In general terms, section 3110 provides that an ARO should be recognized in the following manner.

First, it provides that a firm should recognize the fair value of an ARO in the period in which it is incurred (in accounting terms) when a reasonable estimate of fair value can be made. The ARO may be recognized notwithstanding uncertainty about the timing or settlement of the ARO or whether the ARO is a conditional obligation. The fair value of the ARO is generally determined using an “expected cash flow approach,” under which multiple cash flow scenarios that reflect the range of possible outcomes and a credit-adjusted risk-free rate of interest are used to estimate the fair value. Expressed another way, the fair value of the ARO generally equals the present value of estimated future (reclamation) cash flows, using an interest rate that reflects the creditworthiness of the firm.

Upon initial recognition of a liability for an ARO, a corresponding asset retirement cost is added to the carrying amount of the related asset. The asset retirement cost is then depreciated on a systematic and rational basis over the asset’s useful life.

Following the initial recognition of the ARO, the period-to-period increases in the liability owing to the passage of time are deducted as “accretion expenses.” The accretion expenses accrue at the same credit-adjusted risk-free rate of interest that was used to discount the future cash flows.

Subsequent adjustments are required to the foregoing calculations if there are revisions to either the timing or the amount of the expected future cash flows.

The application of section 3110 can be illustrated using the earlier example 2 from the text, the relevant details of which are reproduced below for ease of reference.

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180 Supra note 43.
181 Ibid., at section 3110.05.
182 See, for example, ibid., at paragraphs A15, A18, and A19 of appendix A to section 3110.
183 Ibid., at sections 3110.08 through 3110.10 and paragraphs A23 through A28 of appendix A.
184 The estimated amount will normally take into account multiple possible cash flow scenarios with assigned probabilities, so that the estimated amount will normally represent a weighted average of the possible cash flows.
185 Supra note 43, at sections 3110.13 and 3110.14.
186 Ibid., at sections 3110.16 and 3110.17.
187 Ibid., at sections 3110.18 and 3110.19.
Example 2

The taxpayer begins to carry on a business at the end of year 0, which requires the taxpayer to expend reclamation costs at the end of year 5. The reclamation costs will equal $610 (present value of $379). The taxpayer charges and receives from its customers funding amounts of $100 at the end of each of years 1 through 5 (also with a present value of $379).

For the purposes of section 3110, we will assume that the ARO in example 2 is incurred at the end of year 0 and that its fair value equals the $379 present value of the reclamation costs. Assuming further that straightline depreciation is a “systematic and rational” basis of recognizing the corresponding $379 asset retirement cost, the taxpayer will deduct $76 (one-fifth of $379) in each of years 1 through 5 as depreciation expense. We will also assume that 10 percent per annum is the applicable credit-adjusted risk-free rate. The taxpayer will therefore deduct $38, $42, $46, $50, and $55 as accretion expense in years 1 through 5, respectively (such amounts equaling 10 percent of $379, with annual compounding). The taxpayer’s total expenses will equal $114, $118, $122, $126, and $131 in years 1 through 5, respectively (depreciation expense plus accretion expense).

Recall that, under the reverse depreciation approach, the taxpayer in example 2 would deduct $100, $110, $121, $133, and $146 in years 1 through 5, respectively. Accordingly, the deduction pattern under GAAP is somewhat accelerated relative to that seen under the reverse depreciation approach.

Interestingly, the relative acceleration under GAAP (at least in this example) stems solely from the fact that straightline depreciation is itself accelerated in economic terms in those cases where benefit patterns (such as funding amounts) are constant over time. For reasons discussed in appendix 1, it would be more appropriate, as a theoretical matter, to apply so-called economic depreciation to the $379 asset retirement cost under these circumstances. If economic depreciation were employed as the “systematic and rational” method of depreciation of the asset retirement cost, the taxpayer would deduct $62, $68, $75, $83, and $91 as depreciation expense in years 1 through 5, respectively, and the taxpayer’s total expenses would equal $100, $110, $121, $133, and $146 (depreciation expense plus accretion expense), the same amounts deducted under the reverse depreciation approach. It thus becomes apparent that the GAAP treatment and the reverse depreciation approach would be one and the same if the GAAP treatment applied economic depreciation to the asset retirement cost. However, economic depreciation—also known as “sinking fund” or “annuity-type” depreciation in financial accounting circles—is rarely employed under GAAP.

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188 The straightline assumption is made in appendix B to section 3110, ibid., which provides a series of examples to illustrate the recognition and measurement of an ARO liability and the corresponding asset retirement cost. However, it is stated therein that the units-of-production would likely be applied in practice to the asset retirement cost.

189 See previous example 2 and accompanying text.

190 See example 3 in appendix 1 and accompanying text.