

THE TAXATION AND MANAGEMENT OF ENVIRONMENTAL CLEANUP COSTS: A GROWING WORLDWIDE CONCERN

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THE AUTHORS DIFFERENTIATE BETWEEN ENVIRONMENTAL CLEANUP COSTS AND ONGOING POLLUTION COSTS, REVIEW CURRENT TAX TREATMENT OF THESE COSTS AND PROPOSE NEW TAX POLICIES.

"Environmental Problems are often at the heart of the political and economic challenges we face around the world."

ENVIRONMENTAL DIPLOMACY¹

Environmental cleanup costs include expenditures incurred for the assessment, mitigation and/or remediation of environmental hazards. Lessening and eliminating environmental hazards should be the concern of governments throughout the world. Appropriate tax policy by governmental authorities and management policy by managers can play a major role in reducing environmental hazards.

In this article, the authors differentiate between environmental cleanup costs and ongoing pollution costs, review current tax treatment in this area, discuss the merits of capitalizing versus expens-

ing environmental cleanup costs, and propose new tax policy in this area which should be considered by governmental bodies throughout the world. In addition, the authors review some management policy issues in the measurement of environmental cleanup costs.

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Environmental Cleanup Costs Versus Ongoing Pollution Costs

Environmental cleanup costs include expenditures incurred for the assessment, mitigation and/or remediation of environmental hazards. These hazards can include

APPROPRIATE TAX POLICY . . . CAN PLAY A MAJOR ROLE IN REDUCING ENVIRONMENTAL HAZARDS.

contamination of soil, water and other tangible property. Examples include leaking underground storage tanks, chemical spills, asbestos, lead paint, etc.

Environmental cleanup costs can be differentiated from ongoing pollution costs. Environmental cleanup costs are costs incurred to lessen and/or eliminate pollution which has already taken place, whereas ongoing pollution costs relate to pollution which will occur in the future. Governmental tax policy and managerial policy can and should differ in the treatment of past and future pollution expenditures. Past pollution has already happened whereas current and future pollution does not have to happen. Tax policy and management policy for environmental cleanup costs should be directed at cleaning up the environment in the most economical, efficient and effective way possible. The most economical way would include strategies that result in the least cost possible to governmental units, businesses and other concerned parties. The most efficient way would involve the deploy-

ment of the minimum resources necessary to lessen or eliminate the environmental problem. The most effective way would result in the actual lessening and elimination of environmental hazards.

Governmental tax policy and managerial policy directed toward ongoing pollution can differ from policies directed at cleaning up pollution which has already taken

place. Policy directives toward ongoing pollution can range from "pollute and you go out of business" to "reduce your pollution by a stated percentage each year."

Current U.S. Tax Policy

In the United States, the major tax issue involving environmental cleanup costs is whether the expenditures should be capitalized for tax purposes and depreciated over a period of years or expensed immediately.

The major arguments in favor of capitalizing these expenditures are that they have increased the value of the property, significantly prolonged the use of the property, adapted the property for a new use and/or created benefits with a duration of more than one year. The arguments in favor of immediately expensing these costs are that the expenditures have merely restored the property to its previous condition prior to the polluting activities, allowed the taxpayer to continue to use the property and/or kept the property in usable condition. In many court

cases, the IRS has argued for capitalizing these costs and depreciating them over future periods whereas taxpayers preferred the immediate expensing of these costs. Court decisions have been mixed, with some favoring the IRS and others favoring the taxpayer.²

In January 1998, the IRS finalized a proposed revenue procedure that allows taxpayers to request a letter ruling on the proper tax treatment of environmental cleanup costs incurred in continuing transactions spanning past and future tax years.³ Taxpayers may request a private letter ruling on the deductibility or capitalization of environmental cleanup costs incurred in a continuing project which spans a period of years. The letter ruling can cover years in which the taxpayer has already filed tax returns. A letter ruling will not be issued, however, if the identical environmental cleanup issues are currently pending in litigation in a case involving the IRS and the taxpayer. The Revenue Procedure is effective for letter ruling requests submitted during the two year period: February 2, 1998 to February 2, 2000.⁴

Expensing Versus Capitalizing

A business that is allowed to expense environmental cleanup costs gets a tax benefit from the deduction equal to its marginal tax rate. A \$100,000 tax deduction on a tax return where the marginal tax rate is 35% generates a tax benefit of \$35,000 ($\$100,000 \times 35\% = \$35,000$). If the business is forced to capitalize the \$100,000 expenditure and depreciate it over a period of future years, the value of the deduction is lessened consider-

ably when adjusting for the time value of money. Table 1 shows the tax benefit of a \$100,000 expenditure, assuming it can be expensed immediately versus being depreciated over various periods of time. Immediate expensing of an expenditure is always preferable to capitalization and depreciation of the same expenditure. The immediate expensing preference is more attractive the longer the depreciation period and the higher the associated interest rate. Table 1 shows why businesses prefer to expense environmental cleanup costs while the IRS, in the interest of preserving the nation's tax revenues, often argues for the capitalization of these costs.

Recent U.S. Tax Court Decision

In 1997, the Tax Court ruled that a taxpayer incurring asbestos removal costs in connection with the remodeling of a building was required to capitalize these costs as part of the remodeling plan.⁶ The opinion indicated the asbestos removal costs would not have been incurred if the remodeling work had not been done; therefore, the removal costs were part of the general plan of remodeling and must be capitalized. The taxpayer's arguments that the asbestos removal costs did not increase the value of the building, were made to eliminate a health hazard, and merely restored the building to its prior value before the discovery of the asbestos were denied. If the asbestos removal costs had been incurred separately from the remodeling work, there is good reason to believe that the removal costs would be currently deductible.

TABLE 1

Option ⁵	Interest Rates		
	8%	10%	12%
Immediate Expensing	\$35,000	\$35,000	\$35,000
7 Year Life	26,031	24,342	22,819
10 Year Life	23,485	21,506	19,776
39 Year Life	10,660	8,756	7,389

New Code Sec. 198

The Taxpayer Relief Act of 1997 added new Code Sec. 198, entitled "Expensing of Environmental Remediation Costs."⁷ Code Sec. 198, which is effective for expenditures paid or incurred after August 5, 1997, through December 31, 2000, was added in order to "encourage the cleanup of contaminated sites as well as to eliminate uncertainty regarding the appropriate treatment of environmental remediation expenditures for federal tax law purposes."⁸

Under Code Sec. 198, the taxpayer can elect to currently deduct qualified environmental remediation (cleanup) costs which would otherwise be capitalized. Qualified cleanup costs must be incurred in connection with the abatement or control of hazardous substances at a qualified contaminated site. Hazardous substances normally include toxic pollutants and hazardous chemical wastes. A qualified contaminated site would be property held for use in trade or business, for the production of income, or inventory which is certified by an appropriate state agency to be located within a targeted area which contains a hazardous substance. Targeted areas include empowerment zones and enterprise communities as designated under current law, 76 EPA Brownfield's Pilot Project sites, any population census tract with a poverty rate of 20% or more, and certain in-

dustrial and commercial areas contiguous to these population census tracts.

Normally, expenditures for depreciable property would not be considered as qualified environmental cleanup costs. Allowable depreciation deductions on depreciable property used in qualified cleanup activities, however, would be considered to be qualified cleanup expenses.

In addition, any qualified environmental cleanup costs which are expensed under Code Sec. 198 are recaptured under Code Sec. 1245. That is, gain on the sale of contaminated property, to the extent of the cleanup costs expensed under Code Sec. 198, will be treated as ordinary income gain. Also, Code Sec. 198 does not apply to costs incurred in the demolition of structures, and mining and solid waste reclamation costs.

Current Australian Tax Policy

Australia was relatively late in allowing deductions for environmental expenditures. It was not until 1992 that the Australian Federal Parliament added sections 82B-82BG to the Income Tax Assessment Act, which allow deductions for expenditures on environmental impact studies, and sections 82BH-82BR, which allow deductions for environmental protection expenditures. One reason for the delay was expressed in a

1990 Treasury publication entitled "Economic and Regulatory Measures for Ecologically Sustainable Development Strategies," which reflected a view that environmental policy should not be directed through such broad-based systems as the income tax or sales tax.⁹ Doing so would run counter to the "polluter pays" principle in that it would involve the tax system subsidizing those whose conduct had

in the situation where a corporation voluntarily cleaned up its own pollution, in circumstances where it was under no obligation to do so. An unfortunate consequence of the requirement that the pollution should have arisen out of the taxpayer's income producing activities is that a taxpayer who voluntarily cleaned up pollution, perhaps out of public spirit, is entitled to no deduction.

There are compelling arguments based on the compatible principles of providing incentives and of "pol-

luter pays" that deductions should be more readily available to the "voluntary cleaner" than to the "compelled cleaner."

Interesting tax planning consequences flow from the wording of Subdivision CA. It is a well-established principle that fines and penalties payable under any law, or any amount payable by court order on conviction of an offense under any law, are not deductible for tax purposes. The Australian Environmental Protection Agency can issue notices requiring cleanups, but since such notices are not court orders, work done pursuant to them would be deductible. On the other hand, a fine or penalty imposed for noncompliance with such a notice (which would normally be at least as large an amount as the cost of cleanup) would not be deductible. Hence there is at least some incentive in the tax system for compliance with cleanup notices issued by the EPA and similar bodies.

Proposed Tax Policy

A considerable amount of taxpayer uncertainty currently exists regarding the deductibility of environmental cleanup costs. In the United States, the IRS often argues that these expenditures should be capitalized, while taxpayers, and courts in some instances, have chosen to allow immediate deductibility of these expenditures. The recent *Norwest Corp.* case required the taxpayer to capitalize environmental cleanup costs in the remodeling of a building.¹⁰ Similar confusion exists in the deductibility of environmental cleanup costs in Australia.

The uncertain tax treatment of environmental cleanup costs raises the hurdle for proposed business investment and increases the likelihood that past pollution will not be cleaned up. In the U.S., the IRS, to its credit, has issued Rev. Proc. 98-17, which will allow businesses to request a letter ruling regarding whether environmental cleanup costs should be capitalized and depreciated, or immediately expensed for tax purposes.¹¹ While the new letter ruling procedure will add some certainty to contemplated transactions, it will not necessarily provide businesses with any incentives to make expenditures to help cleanup environmental hazards. New Code Sec. 198 will allow for the immediate deductibility of many environmental cleanup expenditures but it will only be available to businesses that have qualified environmental cleanup costs and only for qualified costs paid or incurred by December 31, 2000.

The only way that businesses will be given the incentive to cleanup environmental hazards is by the various governmental bodies throughout the world clarifying their respective tax laws in this

[T]HE MAJOR TAX ISSUE INVOLVING ENVIRONMENTAL CLEANUP COSTS IS WHETHER THE EXPENDITURES SHOULD BE CAPITALIZED . . . OR EXPENSED IMMEDIATELY . . .

rendered them liable to pay for the environmental degradation they had caused.

Environmental cleanup costs are dealt with in Subdivision CA. The subdivision allows a deduction for "allowable environment protection expenditures" incurred after August 19, 1992. The expenditures must have been incurred for the sole or dominant purpose of carrying on an eligible environment protection activity. These include activities to rectify pollution, and the treatment, cleaning up, removal or storage of waste which resulted from the taxpayer's income producing activities.

Thus, a corporation under a legal obligation to incur expenditures for cleaning up pollution it has caused will be entitled to a tax deduction for that expense. In such circumstances, the legislation can hardly be said to act as an incentive to clean up pollution. It would be more in the nature of a subsidy. This, however, is not the case

area and allowing for the immediate deductibility of environmental cleanup costs. The objective of these changes would be to reduce the hurdle cost for business investment which involves environmental cleanup costs. The public would benefit from a cleaner environment while business uncertainty regarding the deductibility of these expenditures would be significantly reduced.

Management Policy Issues

The point has been made elsewhere in this article of the tax issues involving environmental cleanup costs. That is, whether to expense them as incurred, or whether to capitalize and amortize. While clearly the taxation issue needs to be resolved for the benefit of society as a whole, as well as for the benefit of companies to encourage them to undertake both preventive and remedial action, a strong case may be made for companies to reduce environmentally related costs in the first place, even before tax incentives are being sought. This is an area where management accountants can add value to their organizations.

Even before claiming tax deductibility, it is imperative that careful consideration be given to identification and measurement of cleanup costs. Such consideration may lead to identification of environmentally unfriendly activities that can be eliminated and thereby reducing future cleanup costs and thus the amount of burden placed on the tax system. Activity-based costing (ABC) has been proposed as a means of achieving this potential.¹² The authors argue that by incorporating environmental costs into an effective ABC system,

companies can identify more accurately those plants and products which are driving up their environmental expenditures. This, in turn, better equips companies to determine which products to eliminate, which raw materials to change and what processes to modify, thereby reducing potential environmental cleanup costs in the first place.

There is also evidence that taking a proactive approach to environmental issues not only saves money in the long run, by reducing cleanup costs, but that it can also produce immediate and sometimes dramatic savings in production costs.¹³ Such an approach should be concomitant with consideration of tax deductibility of the cost. Similarly, accountants are in a position where they should strive to uncover hidden regulatory and compliance costs and pass this information to the engineers, production personnel, marketing staff, and others.

Through use of an activity-based approach to managing environmental issues, activities can then be highlighted and the

magnitude of their costs identified. If those activities do not add value to the product or process, they should be eliminated or at least minimized.¹⁴ Such a proactive approach to environmental cost control should accompany any tax considerations.

Another accounting-oriented approach to lessening the impact

on the tax system, as well as benefiting the company, is the application of an Environmental Cost Management System. For example, Baker cites a German hosiery manufacturer which found that such a system could in fact lower costs of materials and energy flows which allow opportunities for environmental protection and cost-cutting.¹⁵

One of the prevailing difficulties, however, is the lack of reliable and accepted means of quantifying environmental costs. Baker cites a Price Waterhouse study in the United States in 1992, which observed that "as the base of knowledge grows concerning environmental problems and associated remediation, provision for environmental costs is becoming increasingly common and the inability of a company to estimate costs associated with environmental issues is becoming harder to accept as justification for not recording a liability.¹⁶ Yet a great

THE UNCERTAIN TAX TREATMENT OF ENVIRONMENTAL CLEANUP COSTS RAISES THE HURDLE FOR PROPOSED BUSINESS INVESTMENT AND INCREASES THE LIKELIHOOD THAT PAST POLLUTION WILL NOT BE CLEANED UP.

deal of uncertainty remains as to what constitutes the real cost and how it can be measured."

A number of suggestions have been made regarding the measurement of cleanup costs. Burritt and Gibson, for example, list three types of restoration costs: direct costs, indirect costs and repercussion costs.¹⁷ Direct costs would

include, for example, the value of an oil spill, cleanup and equipment, legal costs and fines, civil and criminal damages, etc. The role of the accountant would first be to identify all relevant costs, and second, to establish which of these can be included as tax deductions. Indirect costs are those

may be found to mitigate the negative impact of such actions, even if the initial estimate is not accurate. Repercussion costs include those costs which affect not only the polluter, but extend to other industry members and often to the general community. Examples of such costs include loss of good-

will and reputation, and increased insurance premiums on an industry-wide basis. While the latter cost could be calcu-

lated in quantitative terms, some of the other repercussion costs are much more intangible and may extend over a considerable period of time, and hence are not easy to quantify and record on the books.

Accountants can also add value to their organization through identifying tax benefits even when the taxpayer needs to capitalize environmentally related costs. This

can be achieved by assigning costs, where reasonable, to assets that can be depreciated rather than to the land itself.¹⁸

Summary And Conclusions

While this analysis has concentrated on the tax treatment of environmental cleanup costs in the United States and Australia, and on general management policy issues involving environmental cleanup, the information can be useful to other governmental units and businesses throughout the world in formulating policies to help cleanup the environment. Environmental hazards represent past pollution which has already taken place. Prevention is no longer the issue. Cleaning up the problem is the issue. The public would be well served by governmental policies which eliminate business uncertainty regarding the deductibility of environmental cleanup costs for tax purposes. The public would also be well served by enlightened management policy regarding the environment.

WHILE CLEARLY THE TAXATION ISSUE NEEDS TO BE RESOLVED . . . A STRONG CASE MAY BE MADE FOR COMPANIES TO REDUCE ENVIRONMENTALLY RELATED COSTS IN THE FIRST PLACE . . .

incurred by other parties such as government agencies involved in cleanup, losses to local businesses, impact on staff recruitment, customer loyalty, etc. Clearly, such costs are much more difficult to measure and include on the books, yet they are real costs and somehow need to be accounted for. By estimating such costs before actions are undertaken which could threaten the environment, ways

ENDNOTES

¹ U.S. State Department, *ENVIRONMENTAL DIPLOMACY* (1997).

² See *INDOPCO, Inc.*, 92-1 USTC ¶150,113, 503 US 79 (1992); *Red Star Yeast and Products Co. v. Com.*, CCH Dec. 21,351, 25 T.C. 321 (1955); *Woolrich Woolen Mills v. U.S.*, 61-1 USTC ¶9397, 289 F.2d 444 (CA-3); *Moss v. Com.*, 87-2 USTC ¶9590 (CA-9); *Mountain Fuel Supply v. U.S.*, 71-2 USTC ¶19681, 449 F.2d 816 (CA-10).

³ Rev. Proc. 98-17, 1998-5 I.R.B. 21.

⁴ *Id.*

⁵ Assumed \$100,000 expenditure, 35% marginal tax rate, straight-line depreciation and considering the time value of money.

⁶ *Norwest Corp. v. Com.*, CCH Dec. 52,008,

108 T.C. 265 (1997).

⁷ Taxpayer Relief Act of 1997, P.L. 105-34, 105th Cong., 1st Sess., §941.

⁸ Joint Committee on Taxation, *General Explanation of Tax Legislation Enacted in 1997 (Blue Book)*, (CCH Incorporated, 1997) at 135.

⁹ Department of Treasury (Australia), *Economic and Regulatory Measures for Ecologically Sustainable Development Strategies* (1990).

¹⁰ See *supra*, note 6.

¹¹ See *supra*, note 3.

¹² P.L. Brooks, L.J. Davidson and J.H. Palamides, *Environmental Compliance: You Better Know Your ABCs*, OCCUPATIONAL HAZARDS, Feb. 1993.

¹³ G. Williams and T. Phillips, Jr., *Cleaning*

Up Our Act: Accounting for Environmental Liabilities, MANAGEMENT ACCOUNTING, Feb. 1994, at 31.

¹⁴ J. Kreuze and G. Newell, *ABC and Life-Cycle Costing for Environmental Expenditures*, MANAGEMENT ACCOUNTING, Feb. 1994 at 41.

¹⁵ D. Baker, *Environmental Accounting's Conflicts and Dilemmas*, MANAGEMENT ACCOUNTING, Oct. 1996 at 74.

¹⁶ *Id.*

¹⁷ R. Burrit and K. Gibson, *Accounting for the Environment*, AUSTRALIAN ACCOUNTANT, July 1993 at 17.

¹⁸ D. Riordan and S. Cairns, *Deduction of Toxic Waste Costs May be a Hazardous Position*, MANAGEMENT ACCOUNTING, Feb. 1994.