BNA Insights

EPA

ENFORCEMENT

The vast majority of disputes over civil penalties for noncompliance with pollution control requirements are resolved through negotiation. The negotiations in many cases resemble the haggling in a foreign bazaar in which both sides only slowly reveal their willingness to conclude a transaction, and discussions often seem unduly long and fraught with difficulty. This article sheds light on generic issues that sometimes arise during negotiation and provides advice to defense counsel about important potential problems.

Practical Advice for Negotiating Settlements of Environmental Civil Penalty Cases

BY ROBERT H. FUHRMAN

Introduction

Various statutes authorize the federal government to seek fines for noncompliance with legally binding pollution control requirements.[1] In 1984, to promote out-of-court settlements, the U.S. Environmental Protection Agency (EPA or the "Agency") issued its general policy on civil penalties.[2] In subsequent years, EPA issued statute-specific civil penalty settlement policies.[3]

In adopting these internal policy statements, EPA did not follow notice and comment rulemaking procedures consistent with Administrative Procedure Act requirements. As a result, the policies do not have the protected status of regulations. They serve instead as guidance to Agency personnel. However, in negotiations, EPA and the U.S. Department of Justice (DOJ) often behave as if these policies are binding and expect regulated entities to comply to settle cases.

The recapture of economic benefit obtained through noncompliance is a recurrent theme of these policy statements. According to the EPA statute-specific policies referenced above, in negotiations, economic benefit must be calculated on the basis of EPA's computer software designed for this purpose.[4] However, the underlying financial methodology incorporated in the software was not adopted through notice and comment rulemaking, and its use has been controversial.[5]

The stated purpose of the 1984 general policy is to establish a consistent Agency-wide approach to the as-

[1] *See, e.g.*, Clean Air Act § 113(e); Federal Water Pollution Control Act § 309(d); and Resource Conservation and Recovery Act § 3008(a)(3).

[2] *See* EPA, "Policy on Civil Penalties" and its companion document, "A Framework for Statute-Specific Approaches to Penalty Assessments: Implementing EPA's Policy on Civil Penalties," both dated Feb. 16, 1984. Hereafter, the second of these documents is referred to simply as "Framework."

Robert H. Fuhrman, an MBA, is founder and principal of Seneca Economics and Environment LLC, a consulting firm in Germantown, Md. Since 1986, Mr. Fuhrman has worked on more than 200 environmental civil penalty cases, providing expert testimony on the economic benefit of noncompliance and other assistance to defendants in civil penalty cases.

This article is intended to provide strategic, not legal, advice.

This article does not represent the opinions of Bloomberg BNA, which welcomes other points of view.

[3] *See, e.g.*, EPA, "Clean Air Act Stationary Source Civil Penalty Policy," October 25, 1991; "Interim Clean Water Act Settlement Penalty Policy," revised March 1, 1995; and "RCRA Civil Penalty Policy," revised June 2003. EPA has issued at least thirty additional civil penalty settlement policies, some of which deal only with specific aspects of programs authorized by statute, e.g., the "Polychlorinated Biphenyls (PCB) Civil Penalty Policy," April 9, 1990; and "U.S. EPA Penalty Guidance for Violations of UST (Underground Storage Tanks) Regulations," OSWER Directive 9610.92, Nov. 14, 1990.

[4] *See, e.g.*, "Environmental Protection Agency Penalty Policy for Stationary Source Clean Air Act Violations," as corrected January 17, 1992, pages 5 and 6; "Interim Clean Water Act Settlement Penalty Policy," March 1, 1995, page 5; and "RCRA Civil Penalty Policy," revised June 2003, pages 29-32.

[5] See text below *infra* footnotes 17 and 36.

sessment of civil penalties[6] while allowing substantial flexibility for resolution of individual cases within these broad Agency guidelines.[7] The general policy's articulated goals are deterrence of future violations, fair and equitable treatment of the regulated community, and swift resolution of environmental problems.[8] The second and third goals notwithstanding, the general policy provides that it is "not intended and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States."[9]

EPA's statute-specific civil penalty policies set out procedures for Agency staff to use in negotiations. These procedures require EPA to calculate "preliminary deterrence amounts" consistent with the goals and penalty language of specific environmental statutes. According to the procedures, preliminary deterrence amounts shall include an "economic benefit" component and a "gravity" component. The latter is supposed to account for the "seriousness" of the violations, including environmental harm and other difficult to monetize criteria provided in statutory language.

In any given case, EPA staff may adjust the preliminary deterrence amount upward or downward based on the degree of willfulness or negligence associated with the alleged violations, the degree of cooperation/noncooperation of the alleged violator, the history of noncompliance, the target entity's ability-to-pay, and other unique factors, including litigation risk. Assignment of dollar values to these factors leaves ample room for subjectivity.[10]

According to an EPA guidance document:

> "The existence and extent of economic benefit is a factual matter which may be objectively measured in dollar terms."[11]

Of course, this statement presupposes that the underlying financial methodology is correct, which may or may not be true.

The same guidance also states:

> ". . . in pursuing a Clean Water Act [CWA, another name for the Federal Water Pollution Control Act] civil penalty in litigation, the government should support its claim through application of the statutory penalty factors rather than the Agency's civil penalty policy methodology. Indeed, *government litigators shall not argue before a judge or a neutral decisionmaker for a civil penalty based upon the specific methodology set out in the CWA penalty policy*, nor should they offer evidence, including expert testimony, as to how specific CWA penalty policy gravity component calculations apply to a given case."[12]

Although the above paragraph, as written, is limited to the CWA, EPA seems never to have presented dollar valuations of the "gravity component" to U.S. district courts under any federal environmental statute.

Since 1984, EPA has conceptualized economic benefit as resulting from three possible root causes: (1) delayed compliance expenditures (that is, costs not spent on time that ultimately have been or will be incurred, such as the cost of purchasing and installing pollution control equipment necessary for compliance), (2) avoided costs (i.e., costs that will never be incurred, such as operations and maintenance expenses not expended during noncompliance because specific pieces of equipment were not yet operating), and (3) "competitive advantages" obtained due to noncompliance (e.g., profits from selling banned products).[13]

In EPA's view, a corporate violator of environmental regulations receives a financial return on these primary sources of economic benefit equivalent to a corporation's "weighted average cost of capital" (WACC). WACC reflects the individual costs of both debt and equity capital, each weighted by the relative proportion of that form of financing in the for-profit entity's capital structure. In cases involving municipal and nonprofit entities, EPA assumes that the financial return is equivalent to the average interest rate on certain types of debt instruments.

In negotiations, EPA assumes high, guaranteed rates of return irrespective of the facts a corporate defendant may muster. For example, it does not matter if, from the date of noncompliance through the date of penalty payment, a firm had billions of dollars in cash and short-term equivalents earning rates of return significantly lower than one percent per annum.[14] Based on the financial methodology EPA uses in negotiations, the Agency still assumes an annual rate of return between 7 and 9 percent, depending on the exact period of noncompliance.[15]

In a typical trial, DOJ relies on expert testimony for quantification of the economic benefit amounts it presents in court and for rebuttal of competing testimony provided by the defendant's economic expert witness. Rather than provide gravity analyses consistent with individual statute-specific penalty policies, DOJ's other expert witnesses usually testify about environmental harm and other statutorily identified penalty considerations without tying them to exact monetary values. DOJ also presents evidence to the court of the statutory maximum daily penalty it seeks pursuant to the Civil Monetary Penalty Inflation Adjustment Rule.[16] In reality, the major points of contention in trials are typically questions of law, disputed facts, the specific control measures necessary to achieve compliance, and the magnitude of the alleged economic benefit.

---

[6] EPA, "Policy on Civil Penalties," op. cit., page 1.

[7] *See*, in particular, "Framework," op. cit., page 27.

[8] EPA, "Policy on Civil Penalties," op. cit., page 1.

[9] Ibid., page 7.

[10] EPA, "Framework," op. cit., page 13.

[11] Edward E. Reich, then Deputy Assistant Administrator for Civil Enforcement at EPA, et al., "Guidance on the Distinctions Among Pleading, Negotiating, and Litigating Civil Penalties for Enforcement Cases Under the Clean Water Act," Jan. 19, 1989, page 8.

[12] Ibid., pages 7 and 8. Emphasis in the original.

[13] EPA, "Framework," op. cit., pages 7-11.

[14] Due to prevailing economic conditions since early 2009, many corporations have retained an unusual amount of money in cash and short-term, near liquid investments.

[15] Of course, a firm is free to argue that its WACC is different from the rate EPA calculated using generalized assumptions. If EPA agrees with the underlying calculations, it is willing to consider using an alternative calculated WACC.

[16] 74 Fed. Reg. 826 (Jan. 7, 2009). For many types of Clean Air Act (CAA), Clean Water Act (CWA), and Resource Conservation and Recovery Act (RCRA) violations, the statutory maximum civil penalty is $37,500 per day for violations that occur after Jan. 12, 2009.

ER ISSN 0013-9211

EPA's Environmental Enforcement Tools

From the mid-1980s through the early 1990s, to strengthen its enforcement program, EPA unveiled and started to use five financial models:

- BEN,[17] a model designed to calculate the "economic benefit" a firm or municipality obtained or may obtain due to delayed and/or avoided compliance costs;
- ABEL,[18] a screening model to test the validity of a corporation's claim that it is unable to pay civil penalties and/or injunctive relief, or to afford Superfund cleanup costs of a given magnitude;
- MUNIPAY,[19] a model designed to determine whether municipalities, counties, and nonprofit entities, such as universities and sewage treatment authorities, are able to pay for civil penalties and/or pollution control requirements;
- INDIPAY, a model to assess whether individuals can afford to pay civil penalties and injunctive relief and/or to contribute to hazardous or solid waste cleanups; and
- PROJECT, a model for calculation of the after-tax present value[20] of "supplemental environmental projects" (SEPs) that EPA sometimes allows alleged violators to undertake to reduce monetary amounts they directly pay to the U.S. Treasury as civil penalties.

In most circumstances, BEN is run before EPA tries to determine whether a corporation, a municipal or nonprofit entity, or an individual has an ability-to-pay problem, or whether EPA will accept a SEP.

Much could be written about each of these models. However, most of the rest of this article is devoted to BEN and the federal government's use of it in negotiations.

The 'BEN Model'

EPA has used its "BEN model" since 1984. As of the date of noncompliance, BEN purports to calculate the present value of the costs that an alleged violator would have incurred assuming "on-time" compliance. BEN then subtracts from that figure its calculation of the present value of the costs, as of the same date, that have resulted or will result from "delayed" (or actual world) compliance.

These costs include capital costs associated with the purchase and installation of pollution control equipment necessary for compliance, the cost of operating and maintaining that equipment over time, and any relevant one-time expenses, such as the cost of performing a study to determine the design capacity of control equipment.

As an optional variable, BEN can include in its "on-time" and "delay" case calculations the costs of replacing control equipment at the end of its useful life. The theory here is that delayed installation of equipment necessary for compliance leads to delay in replacing that equipment at the end of its useful life, thus generating a second episode of economic benefit sometime in the future.[21]

To perform the necessary calculations on an after-tax basis, BEN requires the following additional inputs: the dates of noncompliance, actual (or anticipated) compliance, and assumed penalty payment; an inflation rate; the entity's marginal tax rate in every year during the period of noncompliance; and a "discount rate"[22] to adjust cash flows over time.

EPA has never cited published academic literature in the field of corporate finance to support its use in BEN of the same interest rate both to discount future cash flows to a value in the past and to compound the BEN-calculated "economic benefit" from the date of noncompliance to a present value as of the date of assumed penalty payment.[23]

Academic literature in the field of corporate finance[24] supports the use of the defendant's after-tax debt rate or the after-tax risk-free rate of interest associated with U.S. Treasury bills as the correct rate to use for compounding past to present values.[25] EPA has given these

[17] BEN is short for "economic benefit." It is not an acronym. For discussions of BEN, see the next sections of this article. Also, *see* Robert H. Fuhrman, "EPA's Recent 'Final Action' on the BEN Model," November/December 2005 issue of *Trends*, a publication of the American Bar Association's Section on Environment, Energy, and Resources.

[18] For a discussion of ABEL and MUNIPAY, see Robert H. Fuhrman, "Perspectives on the U.S. Environmental Protection Agency's Treatment of Ability-to-Pay Cases," *Environmental Liability, Enforcement & Penalties Reporter*, April 2009.

[19] Ibid.

[20] By definition, the "present value" is the "discounted" value of future cash flows. See footnote 23.

[21] Delayed compliance will not always lead to a secondary period of economic benefit. For example, this is true when a company plans to close a manufacturing plant and will do so prior to the end of the useful life of the "on-time" equipment, or when future technological or regulatory events might require replacement of the "on-time" equipment before the end of its assumed useful life.

[22] "Discounting" is a technique that financial analysts use to adjust a future stream of projected cash flows to a "present value". The adjustment is for the time value of money and the riskiness of the cash flows. *See*, e.g., Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, sixth edition (2000), chapter 9.

[23] EPA's most complete and thorough discussion of issues related to its discount/interest forward rate methodology appears in its "advance notice of proposed action, response to comment, and request for additional comment" titled "Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases," which appeared at 64 Fed. Reg. 32,948, 32,957-32,959 (June 18, 1999). EPA's statement at 64 Fed Reg. 32,957 that ". . . using the WACC throughout all aspects of the calculation is the most reasonable and preferable approach" lacks any reference to academic literature on corporate finance.

[24] See, e.g., Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, sixth edition (2000), footnote 26 on page 566 and accompanying text. See also, James M. Patell, Roman L. Weil, and Mark A. Wolfson, "Accumulating Damages in Litigation: The Roles of Uncertainty and Interest Rates," 11 *Journal of Legal Studies* 341-364 (1982), at pages 362-363; R.F. Lanzillotti and A.K. Esquibel, "Measuring Damages in Commercial Litigation: Present Value of Lost Opportunities," *Journal of Accounting, Auditing and Finance*, Winter 1990, pages 125-142, at page 134; and Franklin M. Fisher and R. Craig Romaine, "Janis Joplin's Yearbook and the Theory of Damages," *Journal of Accounting, Auditing and Finance*, Winter 1990, pages 145-157, at page 148.

[25] The argument for use of the defendant's after-tax debt rate as an interest forward rate is that, in analyses that do not use hindsight to obtain financial and cost data from the date of

approaches short shrift, arguing, among other things, that they rest on considerations in tort damage cases that are not appropriate in civil penalty cases.[26]

For example, according to EPA:

> "While the appropriate focus in a tort damage action is on compensating the victim (i.e., the plaintiff), this is not appropriate in an enforcement action. The enforcement agency is not suing for damages it has suffered. The goal is not to make the plaintiff whole (i.e., to restore to it the amount by which it has been damaged). The goal of the economic benefit portion of a civil penalty is to return the defendant to the position it would have been in had it complied, and thus disgorge the amount it wrongfully gained."[27]

The government's argument denigrating the two approaches discussed above because they are used in tort damages litigation misses the mark.[28]

The argument for using the after-tax risk-free rate as the interest forward rate in economic benefit calculations is based on the time value of money and the absence of risk when one is adjusting past to present values.[29,30] Simply put, risk applies only to future cash flows because they are inherently uncertain. No such risks apply to past cash flows, which are, by definition, fixed in value and known with certainty.

Further, the purpose of using the after-tax risk-free rate as the interest forward rate in economic benefit calculations is not "to make the plaintiff whole." It is to correctly apply financial theory to calculate economic benefit obtained due to noncompliance.

EPA's rationale for using WACC to adjust past savings to present values confuses savings obtained through noncompliance with the return that a company *might* have obtained due to its possible acceptance of risk with those funds. Indeed, any return above the risk-free rate is obtained only because the company decided to risk losing some or all of its investment to try to obtain a higher rate of return. Stated differently, corporations are free to keep funds in cash or U.S. Treasury bills rather than commit them to risky ventures.

WACC is not a *guaranteed* rate of return. It is an *expected* rate of return. As investors readily understand, actual rates of return can dramatically differ from those they anticipated. Returns can even be negative.

What EPA does in BEN may best be described as asymmetric acceptance of risk. EPA's BEN methodology assumes the upside of an investment that may or may not have occurred, while completely disregarding the possible downside of the hypothetical investment. EPA has never provided an academic citation to support its view that it is correct financial theory to apply an expected rate of return to a *hypothetical* investment in the past.

Contrary to EPA's claim, its program of economic benefit recapture clearly does not contemplate returning a violator "to the position it would have been in had it complied" on time. Even if the target entity "lost money" on the investments it made during the period of noncompliance, EPA nonetheless assumes the violator obtained a return equal to WACC on savings due to noncompliance.

Stated simply, the government's strong insistence about what a company did in the past with its alleged savings from noncompliance is purely speculative. In many cases, the company could have put the funds in a non-interest bearing account (such as a safety deposit box) and made the same investments as it did during the period of noncompliance.[31]

Federal district courts have reached dramatically different conclusions about the appropriate interest forward rate to use in litigated cases, upholding at various times the equity cost of capital[32] (a relatively high rate of interest), WACC[33] (a lower rate), and the after-tax risk-free rate associated with short-term U.S. Treasury bills[34] (an interest rate significantly lower than WACC). In spite of a rejection of WACC as the interest forward rate in *United States v. WCI Steel* (1999) and in *United States v. New Portland Meadows* (2003), and the Third Circuit Court of Appeals' strong disagreement with the use of the calculated WACC as the interest forward rate in *United States v. Allegheny Ludlum Corp.*[35] (2004), EPA still uses its calculation of WACC as the single interest rate in BEN for making financial adjustments both backward and forward in time.[36]

---

a past "event" to the present, delayed and avoided compliance costs are analogous to a debt obligation that ultimately must be paid. When hindsight is used, academic literature on corporate finance supports the use of the after-tax risk-free rate as the interest forward rate.

[26] EPA,"Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases," 64 Fed. Reg. 32,948-32,959, at 32,957-32,959 (June 18, 1999).

[27] EPA,"Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases," 70 Fed. Reg. 50,326 (Aug. 26, 2005), at page 50,355. EPA characterized the notice as a "final action and response to comments."

[28] In regard to the after-tax defendant's debt rate, see footnote 25.

[29] Stewart C. Myers et al., "The BEN Model and the Calculation of Economic Benefit," a paper submitted in March 1997 to the EPA docket on calculation of economic benefit. The paper was prepared on behalf of the "BEN Coalition," a group of trade associations, and the Synthetic Organic Chemicals Manufacturers Association.

[30] In EPA's 1999 and 2005 *Federal Register* notices referenced in footnotes 26 and 27, EPA entirely disregarded the reasoning in the submittal of Dr. Myers and his co-authors. Dr. Myers is a professor of finance at the Massachusetts Institute of Technology's Sloan School of Management and co-author of the widely used graduate-level textbook *Principles of Corporate Finance*. Additionally, Dr. Myers is a past president of the American Finance Association.

[31] Funds for corporate investments can frequently be obtained through cash on hand, selling short-term near liquid securities such as commercial paper, or borrowing.

[32] *Friends of the Earth v. Laidlaw Environmental Services*, 890 F. Supp. 470 , 40 ERC 2063 (D.C. S.C. 1995).

[33] *United States v. Smithfield Foods Inc.*, 972 F. Supp. 338, 354; 45 ERC 1387 (E.D. Va. 1997).

[34] *United States v. WCI Steel Inc.*, 72 F. Supp. 2d 810, 49 ERC 1685 (N.D. Ohio 1999). See also, *United States v. New Portland Meadows*, D.Ore. No. 00-507, 7/29/03, slip op. at 10. *See also* 34 ER 2788, 12/19/03.

[35] The decision of the U.S. Court of Appeals for the Third Circuit in *United States v. Allegheny Ludlum Corp.*, 366 F. 3d 164, 58 ERC 1225 (3d Cir. 2004) raised many objections to the use of a specific WACC rate as an interest forward rate in that case, stating, among other things, "We conclude that the application of the 12.73% rate may so vastly overstate the economic benefit to ALC [Allegheny Ludlum Corporation] of its improper discharges, that it does not 'level the playing field,' and that it constitutes an abuse of discretion." 366 F.3d at 169.

[36] For further discussion of the discount/interest forward rate issue, see Robert H. Fuhrman and John Downie, "Explanation of Recent Settlement in *U.S. v. Allegheny Ludlum*," 36 ER 894, 4/29/05).

ER ISSN 0013-9211

Using identical date and cost assumptions but the different interest forward rate methods accepted by different courts, economic benefit results can significantly vary, sometimes by thousands or even millions of dollars in a given case. In litigation, but not in settlement, BEN's interest forward rate methodology is vulnerable to attack.

Problems that Sometimes Arise in Civil Penalty Negotiations

■ The government refuses to consider financial methodologies other than that of BEN

In settlement negotiations, EPA and DOJ are almost never willing to depart from BEN's financial methodology. Government attorneys may politely listen to complaints about BEN. However, almost invariably, they claim that their hands are tied by EPA's civil penalty policies and that further discussion of methodological issues would be unproductive.

Nonetheless, these same attorneys are frequently sensitive to litigation risk. Even when they claim that they are not moved by dramatically different results based on alternative financial theories, disputes left apparently unresolved in negotiations sometimes influence outcomes. Because gravity calculations and adjustment factors are highly subjective, the government has room for accommodations by modifying the "gravity component" of the penalty without appearing to abandon the standard BEN financial methodology.

Whether the government chooses to make any accommodation depends very much on the probability DOJ attorneys attach to the defendant allowing the case to be resolved through litigation, the difficulty they perceive in prevailing at trial, and the magnitude of the litigation risks the government potentially faces, including establishment of "bad" legal precedents.

If the government perceives that there is almost no likelihood that it will fail to obtain its goals through a negotiated settlement, the course of least resistance for most defendants is to accept BEN for settlement purposes and to abandon alternative financial methods at least for a while. However, if the negotiations get "stuck," at some point it may be worthwhile to remind the government of the defendant's view of the value of the case if it is adjudicated.

■ The government rejects the defendant's views in the case

It is not unusual for the two sides to disagree about the facts and/or the correct legal analysis in a case. For obvious reasons, negotiations usually lead one side or the other, or each party, to abandon some or all of its views. Even after several negotiation sessions, the two sides may be far apart on critical assumptions.

DOJ attorneys may deal with this situation by stating, "Let's agree to disagree," and then trying to move forward with the negotiations as if the defendant's opposing views are no longer relevant. While such an approach may satisfy the government's interests, this tactic has the effect of refocusing the discussion on the government's view rather than on resolving underlying issues, including disputes over cost and date assumptions used in BEN.

There is no reason for the defendant to easily abandon what it believes are legitimate arguments. Indeed, defense counsel should hold its ground and put forward analyses that reflect its view of the correct cost, date, and other assumptions that should be used in BEN.

If one side cannot persuade the other, in order to obtain a settlement either horse-trading must occur or one side must give in to the other, just as in a foreign bazaar! Although DOJ attorneys tend to think that they wear the white hats and therefore their arguments deserve deference, they also may be bluffing in order to obtain a high settlement amount. Higher-ups in the chain of command at EPA and/or DOJ may take a broader view and wish to eliminate road blocks by accepting well-reasoned arguments put forward by defendants.

■ The government refuses to provide copies of its economic benefit calculations

This can be a persistent, noisome problem. EPA and DOJ are not required to provide economic benefit calculations to defendants in settlement negotiations. Both federal agencies have attempted to justify withholding such documents on the assertion that BEN printouts are "enforcement confidential." When the government makes such a claim, it risks signaling that either its economic benefit analyses are too weak to withstand scrutiny or the government has not, in fact, performed the necessary calculations.

Companies should not accept this ploy. They should not negotiate in the dark, nor should they be required to negotiate in the dark.

Withholding BEN calculations may preserve EPA/DOJ's negotiating advantage, but doing so conflicts with two of the three goals of EPA's 1984 Policy on Civil Penalties: fair and equitable treatment of the regulated community, and swift resolution of environmental problems. If pointing this out to government attorneys does not result in a positive response, a second approach may be to cite past instances in which EPA and/or DOJ attorneys have provided such information to defendants without any claim that the BEN output is "enforcement confidential." The necessary but possibly irritating follow up question is why the results in this case are considered "enforcement confidential," whereas they were not treated as such in other cases.

While it may not always be necessary to cite individual situations, defense counsel would be well advised to solicit such information from other defendants' attorneys and/or consultants who have worked on numerous civil penalty cases. Obtaining such information and presenting it to the government will likely produce a desirable response.

However, if resistance continues, the last resort is to appeal to superiors of the DOJ/EPA attorneys in writing, possibly with copies of the correspondence also being sent to the relevant EPA Regional Administrator, the head of the EPA enforcement program, and/or senior managers at DOJ, as well as to relevant Congressmen. One can reasonably anticipate that EPA and DOJ attorneys will cooperate to some decree without defense counsel having to resort to this tactic. (Employment of heavy-handed tactics usually is neither necessary nor appropriate in good-faith negotiations.) A simple gingerly framed suggestion that this is a possible next step may be sufficient to achieve progress.

Nonetheless, in some negotiations, EPA or DOJ counsel will provide only a subset of the inputs they used in

BEN, along with the results of the calculations.[37] When government attorneys do this, it is important to identify the version of BEN that EPA or DOJ used. EPA sporadically updates BEN, changing the discount/interest forward rates, the combined federal and state marginal tax rates, and the inflation rates associated with pollution control expenditures.[38] Each of these variables may have a significant impact on the results BEN generated.

When the government has provided its cost and date assumptions, a financial analyst using the most recent version of BEN can attempt to determine whether the government's calculations make sense and, if so, try to determine missing assumptions through trial and error. Sometimes it may turn out that the government used a superseded version of BEN, whereas the most recent version produces lower economic benefit results. In such circumstances, the government attorneys are hard pressed not to agree to use the current version of BEN.

However, when the two sides have used apparently identical assumptions, including the same version of BEN, but produced significantly different results, more information and more detailed analysis are required. Sometimes the cause may be as simple as data entry errors or one side used the same cost figures as the other but assumed a different "cost estimate date," i.e., the day, month, and year associated with the estimate. (Correcting such errors could be very important.) Other times the causes of the differences may be more complex and bear further inquiry that would not be necessary if the government had released the BEN input and output summary pages. Defense counsel may once again need to press for release of those pages, even if doing so requires an appeal to upper management at EPA or DOJ, which can be annoying to the government's attorneys.

■ The government's calculations do not consider past EPA guidance

One potential complication in settlement negotiations is that EPA has not revised its document known as the *BEN User's Manual* (the "*User's Manual*" or "*Manual*") since August 2000. Still, that document contains much useful information not included in the relatively limited "help menu" embedded in the BEN software. As a result, disputes may arise because the government's individual analyst or attorney may not be familiar with guidance provided in the *User's Manual* but absent for no particular reason from the help menu.

For example, page 3-11 of the August 2000 version of the *Manual* recognizes that operations and maintenance (O&M) expenses associated with new pollution control equipment necessary for compliance may be lower than similar costs associated with the replaced non-complying equipment. In this context, the *Manual* states that it is legitimate to consider incremental net O&M cost savings in BEN, as well as credits for increased heat recovery or product or byproduct recovery. To quote the *Manual*:

> "If the resulting incremental O&M cost is negative, the net cost savings may be used in determining annual costs. Credit is given only for annually recurring cost savings that are both documented and directly related to compliance."[39]

Another example concerns a situation in which a violator complies in, say, three stages, each of which results in an incremental pollution reduction. Page 4-4 of the August 2000 *Manual* states that this situation can be modeled as three separate BEN calculations, each of which has the identical date of noncompliance but possibly a different cost and certainly a different compliance date.

In this situation, without knowledge of the insights provided in the *Manual* and without any ill intent, the EPA analyst or attorney may insist on using a single calculation based on the total capital expenditure and the latest date of equipment installation as the date of compliance. Government attorneys are, however, frequently willing to follow the guidance in the *Manual* when a problem of this nature is identified and they can find no policy reason for concluding that it is incorrect or inconsistent with current EPA policy.

In light of the above, it is sometimes useful in negotiations for defense counsel to understand EPA's prior guidance documents or to obtain assistance of an individual possessing such knowledge.

■ The government's economic benefit calculations contain incorrect assumptions due to faulty information provided on behalf of the defendant

In a typical case, the government obtains much or all of the cost information that it uses in BEN from the target entity's answers to EPA information requests sent pursuant to environmental statutes.[40] In many cases, the target may have tried to impress the government with how much money it spent to bring a facility into compliance. This is a bad strategy.

Answers to information requests should only include the correct answers to the questions that were asked, perhaps with explanatory notes as necessary to provide correct context. Providing accurate but irrelevant cost information, such as costs incurred during the time period in question that were not necessary for compliance or that were incurred "on time," may lead to overstated economic benefit results. Such situations could require defense counsel to backtrack, which can harm the credibility of both the defendant and its counsel.

In other situations, the defendant and its counsel should be aware that the pollution control equipment installed to achieve compliance may have been sized to deal with both past and future requirements. To quote an example in the *Manual*:

> "If the tertiary treatment system was unnecessary to prevent the violations alleged in the complaint, but

[37] It is not clear how government attorneys can provide economic benefit results and only a subset of input assumptions but claim that the printouts showing all the assumptions and results are "enforcement confidential."

[38] BEN provides various embedded inflation time series, including the *Chemical Engineering* Plant Cost Index (PCI), *Engineering News Record* Construction Cost Index (CCI), Producer Price Index for Finished Goods (PPI), Gross Domestic Product Implicit Price Deflator (GDP), and Employment Cost Index (ECI). The selection of the specific inflation index may have a small or large effect on a BEN calculation. One cannot assess the validity of the chosen time series and its significance without knowing which time series was selected and the rationale for that choice.

[39] EPA, *BEN User's Manual*, August 2000, page 3-11.

[40] For example, such information requests may be sent pursuant to CAA Section 114, CWA Section 308, or RCRA Section 3007(a).

ER ISSN 0013-9211

rather is necessary for achieving compliance with future standards, then subtract its cost from the capital investment. Recall that the capital investment should reflect the pollution control system that was necessary to remedy the violations at the time and under the conditions alleged in the complaint. The violator, however, must convince EPA that the additional cost is truly unrelated to remedying the violations alleged in the complaint."[41]

■ The government's calculations include savings due to noncompliance that predate the date of noncompliance alleged in the complaint

When such a situation arises, it is important for defense counsel to raise an objection. DOJ counsel may respond that the government is free to inform the court of the total amount of economic benefit obtained by the defendant irrespective of the statute of limitations reflected in the complaint. This situation may pose a dilemma for both parties.

Federal environmental statutes such as the CAA and CWA require that the court "consider" various statutorily identified factors, including economic benefit. DOJ's use of a longer period of noncompliance than the period stated in the complaint might be viewed as consistent with that statutory language. However, such a practice might also be viewed as inconsistent with "fair and equitable treatment of the regulated community," and, in settlement negotiations, with "swift resolution of environmental problems." Defense counsel should be prepared to deal with this situation.

■ The government's calculations are not based on the least costly means of compliance

In *U.S. v. Allegheny Ludlum Corp.*,[42] the U.S. Court of Appeals for the Third Circuit directly addressed this issue. Finding that this question had not been addressed by any Court of Appeals, it held ". . . that economic benefit analysis should be based on the least costly means of compliance."[43]

End of story.

■ The government's calculations incorrectly treat "replacement cycles" for capital equipment

Particularly when the useful life of equipment is short, the government's argument for including a capital replacement cycle in BEN tends to be strong. However, the longer the useful life of the equipment, the weaker that argument may be.

In the absence of more complete information, EPA analysts typically assume a useful life of fifteen years for major pieces of control equipment.[44] Depending on the specific cost and date assumptions in the particular analysis, the replacement cycle assumption may have a large impact on the magnitude of the calculated economic benefit.

In a hypothetical BEN calculation where no replacement is assumed, economic benefit may be calculated to be X dollars. In contrast, with the same assumptions and a replacement cycle based on an assumed 15-year useful life, the result may increase by as much as 50 percent. With the same cost and date assumptions but capital replacement based on a useful life of 20 years, the increase over the baseline may approximate only 35 percent.

In cases where a plant shutdown has already been announced for, say, ten years after the date of noncompliance, there may be no valid reason for assuming replacement of capital beyond the year in which "on time" installed equipment would have reached the end of its useful life. In cases where a vendor will state in writing that the anticipated useful life of the equipment is 20 or 30 years, there is no reason not to challenge the government's assumption of a shorter useful life.

In situations where technology or industrial practices are rapidly changing, or more restrictive regulations are predicted to go into effect, which will cause early replacement of the equipment, the assumption of a replacement cycle in the very distant future seems highly speculative. This could cause the federal government to argue for a twenty- or thirty-year replacement cycle, whereas the defendant might argue with some credible basis that no replacement cycle should be considered.

Rather than accept EPA or DOJ's speculative argument in negotiations, one solution might be to calculate economic benefit based on a long replacement cycle and average that BEN result with economic benefit calculated on an assumption of no capital replacement. If the individuals on both sides are fair-minded, this could be a way to diminish the speculative nature of the calculation and not force either side to abandon what it considers to be a reasonable though somewhat speculative assumption.

It should be noted that various pieces of equipment have different useful lives. There is no instruction in BEN's help menu or in the *Manual* that states that the same useful life must apply to all equipment considered in a BEN analysis for a given facility. On occasions when the federal government chooses to release only partial cost and date assumptions, without obtaining trial and error BEN calculations it may be very difficult for defense counsel to discover that the government made a uniform useful life assumption for all pieces of equipment. Such an assumption may unfairly bias the results of the analysis.

■ The government treats some actually expensed costs as if they were capitalized

This situation, which may unjustifiably increase the proposed civil penalty amount, need not occur because EPA or DOJ intended to inflate the results. It may simply be a byproduct of incorrect information. When this situation occurs, defense counsel should provide documentation showing the actual tax and accounting treatment of these expenses, including whether the Internal Revenue Service and/or independent auditors objected to expensing these costs.

BEN was designed to consider actual tax treatment. Speculation as to whether the costs in question could have or should have been treated as capitalized is irrelevant.

---

[41] EPA, *BEN User's Manual*, August 2000, page 4-2.

[42] 187 F. Supp. 2d 426 (W.D. Pa. 2002); 366 F.3d 164 (3rd Cir. 2004).

[43] 366 F.3d 164, at 185.

[44] Not all installations of new pollution control equipment should be treated as delayed costs. Some new equipment may have been purchased to replace equipment at or nearing the end of its anticipated normal useful life.

■ The government argues that its economic benefit results should prevail in settlement because at trial DOJ will seek to recover "illegal competitive advantages" obtained due to noncompliance

One may consider this approach coercive. Nonetheless, for almost three decades, EPA has considered "benefit from competitive advantage" to be recoverable from violators. So beneath the threat there may be legitimate issues that should be addressed.

In 1984, EPA provided the following as examples of situations in which "competitive advantage" could result from noncompliance:

- Selling banned products.
- Selling products for banned uses.
- Selling products without required labels or warnings.
- Removing or altering pollution control equipment for a fee (e.g., tampering with automobile emission controls).
- Selling products without required regulatory clearance (e.g., pesticide registration or premanufacture notice under the Toxic Substances Control Act).[45]

In 1994, a law review article asserted that BEN should be changed "to account for increased sales and permanent market share gained during periods of environmental non-compliance."[46] However, the supposition that savings from noncompliance can enable a violator to obtain a permanent market share increase does not stand up very well under critical analysis.

In most circumstances, a company can achieve the same levels of production and revenues regardless of whether it complied with environmental requirements. In general, a company does not need savings from noncompliance to lower its prices on products, thereby enabling it to retain or expand its market share. Furthermore, for most corporations, the amount of money potentially saved through noncompliance with a specific regulatory requirement is generally so small that it would have virtually no effect on the company's ability to compete and to expand its market share. Lastly, assuming *arguendo* that the opposite is true, it would be very difficult for the government to prove that a "permanent" increase in market share directly and solely resulted from noncompliance.[47]

In 2002, EPA's Science Advisory Board (SAB) established an "Illegal Competitive Advantage Economic Benefit Advisory Panel." The Panel was charged with reviewing an EPA white paper on illegal competitive advantage and reached the following conclusions:

- "It is not clear what the modifier 'competitive' is intended to convey."
- "Increases in market share will often be difficult to identify in terms of comparing the noncompliance scenario with the unobserved counterfactual compliance scenario; and observed increases in market share might be difficult to attribute exclusively to the noncompliance."
- "In any case, increases in market share are not inherently valuable to the firm; what matters is the impact of the changes in market share on profits."[48]

■ The government claims that in court it would seek damages for "wrongful profits"

The concept of "wrongful profits" is best exemplified in the "*Dean Dairy*" case.[49] In that case, prior to trial, the parties stipulated that no economic benefit had been obtained due to delayed and/or avoided costs. However:

> ". . . the U.S. District Court for the Eastern District of Pennsylvania, lacking guidance from economic experts, accepted a novel theory of economic benefit advanced by the government. The court accepted the government's claim that the proper measure of economic benefit . . . included the net revenues obtained during the period of noncompliance by not reducing plant production sufficiently to achieve compliance."[50]

The Third Circuit's decision in *United States v. Allegheny Ludlum Corp.* (2004) concerning the "least cost means of compliance" might prove helpful in this regard.

The lower court decision in *Dean Dairy* (1996) was not based on the least cost means of compliance, the installation and operation of on-site pre-treatment equipment, the compliance measure actually taken. If this approach had been implemented "on time," the result would have been zero economic benefit because the increased capital and operations and maintenance costs that Dean Dairy would have borne would have been completely offset by savings in fees paid to the publicly owned treatment works during the relevant time period.

Rather, the *Dean Dairy* court chose a more expensive compliance option—a production cutback—and calculated economic benefit on that basis.

In fairness, it should be recognized that the Third Circuit's decision in *Dean Dairy* reflected its view that the lower court had ample discretion to apply its own definition of economic benefit.

Should this matter arise in negotiations, defense counsel needs to be prepared to join this issue with appropriate legal argumentation.

---

[45] EPA, "Framework," op. cit., page 10.

[46] Charles Garlow and Jay Ryan, "A Brief Argument for Inclusion of an Assessment of Increased Market Share in the Determination of Civil Penalty Liability for Environmental Violations: Letting Corporations Share the Regulatory Burden of Policing Their Markets," *Boston College Environmental Affairs Law Review*, Volume 22, Issue 1, Sept. 1, 1994, pages 27-48, at page 38.

[47] The first three sentences in this paragraph were taken almost verbatim from Paul Wallach, Eric S. Andreas, and Robert H. Fuhrman, "Comments of the Ad Hoc Group Submitted to the Public Docket on Calculation of Economic Benefit of Noncompliance in EPA's Civil Enforcement Cases," Sept. 30, 1999, pages 19 and 20.

[48] All three of these quotes come from "An Advisory of the Illegal Competitive Advantage (ICA) Economic Benefit (EB) Advisory Panel of the EPA Science Advisory Board," Sept. 7, 2005, page 13. The panel was composed of academic economists selected by EPA.

[49] *United States v. Municipal Authority of Union Township and Dean Dairy Products Inc.*, 150 F.3d 259, 46 ERC 1977 (3rd Cir. 1998).

[50] Jon S. Faletto, "Negotiating Resolution of Environmental Enforcement Actions," *Northern Illinois University Law Review*, summer 1998, 18 N. Ill. U. L. Rev. 527.

ER ISSN 0013-9211

■ The government is responsible for unduly long periods of delay in negotiations

Negotiating settlements of civil penalty disputes takes time. In BEN calculations, penalty amounts continue to compound at the government's calculated WACC rate until the defendant pays the penalty.

An alleged violator may try to argue for a penalty reduction on the basis of actions that EPA or DOJ took that appear to have unduly increased the time required to resolve a given case. Enforcement attorneys are unlikely to be persuaded. In fact, some civil penalty policies allow the government litigation team to increase the magnitude of the gravity component of the penalty by applying an adjustment factor for "recalcitrance" if settlement is not achieved according to what the government considers to have been a reasonable time frame. This is another strategy the government may use to put pressure on the defendant to quickly eliminate points of contention, including complaints about delays arguably brought about by the government.

In 1999, EPA offered defendants a possible way out of this dilemma—pay the United States:

> ". . . the benefit portion of the penalty while the case is still in litigation. EPA will cut off the compounding rate at the date of payment. Thus, there will no longer be any dispute in the case over the appropriate compounding rate from the date of payment into the future. In appropriate cases, the United States may consider allowing the violator to escrow funds for the economic benefit portion of the penalty demand (whether at the compliance date or any time).[51]

An alleged violator could even try to make a down payment on the potential penalty amount by offering to put into escrow the portion of the penalty that it considers noncontroversial. Whether the federal government would be amenable to this approach is unknown.

For reasons that are not clear, few companies have pursued the option of trying to escrow all or a portion of economic benefit to eliminate or minimize further compounding for interest.

Conclusion

Negotiations are often difficult and prone to point and counterpoint sparring. In civil penalty negotiations, the defendant's best weapon is the truth supported by well reasoned, clear, and compelling legal and technical analyses.

---

[51] Ibid., footnote 26, at page 32,959.