EPA “Munipay” Model

QUESTION

The following question was sent to members of the NACWA Legal Affairs Committee on January 12, 2009:

“We are writing to you as a member of NACWA’s Legal Affairs Committee with a request for information from a NACWA public utility member. This inquiry involves a proposed state Water Quality Enforcement Policy. In the section of the Policy on assessment of administrative civil liability, calculation of economic benefit is addressed. The Policy indicates that both EPA’s BEN model and “munipay” model are acceptable methods for calculation of economic benefit. The NACWA public agency member has no experience with the “munipay” model and is asking the following questions:

1) Are any NACWA members familiar with the EPA “munipay” model and able to provide information as to whether it is a useful tool and/or whether it appeared to fairly assess “economic gain” from delayed compliance or not?

2) If not useful, what are the primary flaws and problems with the application of this model in assessing civil penalties for POTWs?

3) Are there any critiques, assessments, or analyses of this model that you recommend looking at?”

RESPONSES

The following responses were received from members of the Committee:

Response 1: We had EPA applying the "munipay" model in negotiation of penalties for both KUB and the City of Atlanta. I found that EPA really had an idea on what they wanted the penalty to be and then "used" this model as a way of backing into the amount. EPA claims it results in much lower penalties than the BEN model. That is probably true although I haven't seen it in practice.

Response 2: Our utility doesn’t do this but I believe it’s the “parking ticket system.” I know our pretreatment system discussed it years ago (I believe EBMUD was doing it) and wanted to do it for LODs and NOVs – basically smaller infractions where issuance of an AO was not cost effective. So for example, rather than just get a NOV for exceeding your pH limits three times this month – you get a computerized ticket that charges you $10 or $15 for each infraction. When you think about it, it really does makes sense – if you figure it costs the same (if you count administration) to send out a letter LOD or NOV and you don’t get anything back on that – but I’m guessing the downside (flaws/problems) would be that then you have to figure out what to do if people don’t pay (i.e. increased collection efforts for small amounts, etc).

Response 3: First of all, the MUNIPAY model is intended to evaluate a community’s ability to pay; BEN is the model that assesses potential economic gain from delayed compliance. To gain a better understanding of EPA’s MUNIPAY model, the Overview is included below.

Note that it includes some cautions and limitations regarding the model’s use that should be seriously considered. In addition, while the model’s calculations may “have a solid grounding in the academic and professional literature of fiscal management and public finance,” experience has shown that EPA’s staff sometimes misapply or misinterpret such tools in ways that undermine their appropriateness. Furthermore, as noted in the Overview, “MUNIPAY by itself is not appropriate for use at a trial or in an administrative hearing.”

Finally, general models do not always provide an adequate mechanism for considering specific local factors and national economic conditions (such as the current recession) can substantially that can affect a community's ability to pay.

Consequently, any community employing this tool in negotiations with EPA would be well advised to seek someone with relevant economic expertise to provide assistance in both interpreting of the model's output and assessing the impact of other factors and conditions.

Overview

In environmental enforcement cases, the defendant/respondent may claim an inability to afford compliance costs, a Superfund cleanup contribution, and/or a penalty that the U.S. Environmental Protection Agency (EPA) seeks (hereafter called "environmental expenditures"). The ABEL model has long been available to enforcement staff to evaluate the financial health of corporations, and the more recently developed INDIPAY model evaluates individuals' finances. The MUNIPAY Model provides the analogous role in evaluating the economic and financial condition of municipalities. This includes cities, towns, and villages of any size, and even independent and publicly owned utilities (e.g., regional wastewater treatment plants). Other local and regional governmental jurisdictions may also be amenable to a MUNIPAY analysis.

MUNIPAY performs two separate sets of analyses: a demographic comparison, and an affordability calculation.

The demographic analysis uses U.S. Census data from 1990 and 2000 to compare the municipality to state and national norms. The comparison includes indicators for both the community's population and income. The analysis also shows how the municipality's position has changed over time, both relative to itself and relative to changes in state norms. The demographic analysis does not give the user a specific conclusion on the municipality's demographics, but instead provides a better understanding of long-term changes in the community's resource base.

The affordability analysis involves calculations for the amount of currently available funds and then, if necessary, the amount of funds available through financing. The currently available funds calculation looks for any excess monies in the municipality's "General Fund" balance and, if applicable to the case, its "Enterprise Fund" working capital balance. If currently available funds are not sufficient to pay for the environmental expenditures, the affordability analysis then assesses the municipality's current debt burden and its ability to take on additional debt to finance the environmental expenditures. Both sets of calculations have a solid grounding in the academic and professional literature of fiscal management and public finance.

Despite MUNIPAY's ability to provide a point estimate of the municipality's level of affordable expenditures, municipal affordability cases still require the user's best professional judgment. MUNIPAY does contain default values for certain parameters such as the maximum incremental tax burden from the environmental expenditures, but the user must still decide whether those default values are appropriate for the particular case. The model can help with these judgments, but final determination of the municipality's affordability ultimately is a decision only the enforcement professional can make.

Finally, although MUNIPAY is a sophisticated screening tool that can greatly assist enforcement professionals in evaluating municipal affordability claims, MUNIPAY by itself is not appropriate for use at a trial or in an administrative hearing. Rather, it is principally for use in settlement negotiations. If affordability testimony is to be presented at trial or in an administrate hearing, an expert should provide an independent financial analysis.

Response 4: BEN and MUNIPAY are both EPA sponsored financial analysis models. BEN is used to calculate the financial benefit of non-compliance. MUNIPAY is different in that it calculates the municipality's ability to pay a stipulated fine or penalty.

We have an economic/engineer that is intimately familiar with BEN but not MUNIPAY (although we could certainly get up to speed). However, if the member were to hire someone they might be better off contacting R.H. Fuhrman. It appears he deals with these kind of issues day in and day out and may be willing to offer insight........ http://www.seneca-economics.com/fuhrmancp.html#case