

What Gets Measured Gets Done: Two Years into the CUNY-EPA Audit Agreement

It is the conventional wisdom in management: What gets measured gets done. We all learned this lesson the first time a teacher warned us to pay attention to a specific point because it was likely to show up on the exam. As managers, we use tools such as performance evaluations, annual reviews, and defined incentive plans to reinforce this concept to our employees.

Similarly, stakeholders look at indicators such as productivity, profitability, and stock price to convey this point to organizational leaders. It may be apocryphal, but it was said that when Jack Welch was the CEO of General Electric, he had a terminal on his desk that showed only one thing: minute-by-minute changes in the value of GE stock. What gets measured gets done.

Assuming that this axiom is valid, the trick is then to figure out what should be measured to promote specific results, and how to let people know what you will be measuring. There is little question that GE stock increased in value throughout Jack Welch's tenure, but it would be

The City University of New York moves forward with its voluntary environmental disclosure initiative

misleading to suggest that this happened solely because Welch tracked stock price changes constantly. GE also measured profitability and the growth of each profit center, evaluated managers relentlessly,

and was one of the strongest proponents of tracking continuous improvement using the Six Sigma statistical methodology.

EPA's College and University Initiative

General Electric may be *sui generis*, but then so are colleges and universities. With new students every semester, tenured faculty members, and very high institutional status, it is understandable—and probably beneficial—that colleges and universities consider themselves to be unique.

This is also why the United States Environmental Protection Agency (EPA) decided in 1999 to undertake a national college and university initiative. EPA felt that colleges and universities had to be reminded that they are subject to the same

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environmental standards as everyone else, that they will face the same penalties and negative publicity as everyone else, and that they must commit the necessary resources and management attention to environmental issues, just like everyone else. Furthermore, EPA felt that colleges and universities, because of their status, should set a standard of environmental leadership.

As part of the initiative, EPA announced that campuses were expected to be in full compliance with the Agency's requirements, and that EPA would measure compliance in one of two ways—either by conducting direct EPA enforcement inspections or by allowing colleges to enter into voluntary audit and disclosure agreements.

The first approach was clear-cut: If you get audited and are found to be out of compliance, you are cited and fined. The second was more flexible. It allowed academic institutions to negotiate an agreement that would permit them to disclose and correct findings in exchange for a diminution or waiver of penalties.

As soon as colleges and universities realized that EPA was serious—and it took only one or two very public, very expensive fines to convince them—most began to explore the voluntary audit and disclosure alternative.

CUNY Moves Early on Voluntary Disclosure

The City University of New York (CUNY) is the nation's largest urban university, with 19 campuses and more than 400,000 students spread throughout New York City's five boroughs. CUNY was one of the first public universities to opt for voluntary disclosure.

The CUNY-EPA audit agreement was signed in January 2003, and the first audit was initiated one month later. As of this writing in spring

2005, CUNY has conducted a total of eight audits under the agreement and has 11 more to go. At this juncture, CUNY is still striving to achieve its ultimate goal of 100 percent compliance, but the goal is a lot closer than it was two years ago.

How this happened in such a short time, and how the CUNY audit program has begun to transform the university's environmental health and safety (EHS) culture, makes for an interesting story.

In a prior article (Apsan, 2003), I described the beginning of the CUNY audit program. This article offers additional insights and also describes some lessons learned over the past two years.

The Environmental Audit Process

The audit program began with some initial awkwardness but has developed a certain procedural rhythm.

The CUNY-EPA agreement delineated the regulatory programs that would be covered and the schedule of campuses that would be audited in each of the five years of the program. CUNY also advised EPA which consulting firm would serve as the independent auditor. Almost everything else about the audit program (including basics such as the format of audit reports, pre- and post-audit activities, and even the ultimate signatory of the disclosure documents) has evolved over time.

Although CUNY's audit program is still a work in progress, it has already served as an ongoing opportunity for organizational learning and improvement.

Preparing for the Audit

Several months before each audit, the CUNY EHS leadership, the campus leadership, and the consulting team meet to map out strategy. The audit content is similar for each campus, but the specific scope, schedule, and personnel, as well as unique campus considerations, must all be considered.

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Typically, the college leadership (the president, the provost, and the vice president for administration) provides general guidance and support, and then delegates responsibility for the actual work to the deans, department chairs, and facilities managers. They, in turn, charge the faculty, academic staff, buildings and grounds personnel, procurement personnel, and maintenance personnel. In almost every case, the campus EHS officer serves as the overall point person for the audit.

How much preparatory work is necessary prior to an audit? And how far in advance of the audit should it begin? These are questions asked by every campus that has an audit approaching.

Obviously, the campuses that were audited early in the program had less time for preparation. The campuses that will be audited later in the cycle have more time, plus the advantage of shared learning from all the previous audits.

After eight audits, the key lesson learned is that preparing for an audit is time-consuming and demanding, so the sooner you get started and the more resources you commit to the task, the better off you'll be.

Pre-Audit Activities

There are many preliminary meetings in the months prior to an audit, but the campus kickoff meeting is generally acknowledged as the formal start of pre-audit activities. In most instances, the college president chairs the meeting, and several dozen campus leaders may participate.

In some cases, the president may gather all campus personnel who might be involved in the audit program (potentially several hundred people) into a large lecture hall and formally charge them. Regardless of the method, most campuses have benefited from the clear sense of shared mission that is enunciated by the senior leadership of the college.

After the president shares some introductory thoughts, the audit team then briefs the audience

on the mechanics of the audit. Participants at the meeting typically have many questions. Few have ever participated in an environmental audit, and being audited can be anxiety-provoking even among seasoned professionals. The EHS audit team tries to answer all of the questions and encourages everyone to think of the campus EHS officer as their primary resource.

The pre-audit meeting generally precedes the actual audit by several weeks. Most of the intervening time is spent disposing of unused chemicals and other wastes from the campus and reviewing the regulatory issues that will be addressed by the audit.

Visiting a campus in the weeks before an audit is like visiting a study hall during final exams reading week. Some students may seem relatively calm because they have worked hard all semester. Others may look more anxious because they haven't.

But even if it seems as if the entire campus is cramming for a difficult exam, there is nothing wrong (or unusual) with working hard to prepare for an audit. This is the period when motivation is highest, and campuses try to focus that high energy level in a positive direction.

Performing the Audit

Given all the pre-audit stress, the actual start of the audit may seem anticlimactic.

The auditors arrive on campus and set up shop in an office or conference room designated for them. The campus typically provides the auditors with access to basic administrative equipment such as telephones, copying machines, fax machines, and Internet connections.

After a short meeting to plan the auditing week (or two weeks if the campus is large or com-

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plex), the auditors fan out (individually or in teams) to inspect the campus. The months of preparation are over, and the audit has begun.

Should a campus representative accompany the auditors at all times? Accompanying the auditors gives campus EHS personnel a chance to learn from experienced professionals in real time, as well as an opportunity to explain or clarify potential audit findings as they are identified. Furthermore, today's heightened security concerns make most campuses uneasy about having strangers snooping around, whether they are compliance auditors or not.

Most CUNY campuses start with the intention of having a campus representative accompany the auditors at all times, but soon realize that this is a very difficult task. The auditors try to inspect every room, lab, and storage space on campus, which is a time-consuming and tedious activity; campus personnel have other ongoing responsibilities. As a result, once the auditors begin to settle into a routine, campus staff may accompany them as scheduling permits, rather than 100 percent of the time.

At the end of each day, the auditors and the EHS staff meet for a daily out-briefing. During the out-briefing, the audit team presents a summary of all tentative findings discovered during that day, supported by digital photos and other forms of documentation.

If, after discussion, there are no extenuating circumstances regarding a particular finding, and no compelling reasons for having it removed from the day's list, the finding is entered into the audit database. This process repeats itself regularly throughout the audit.

Audit Completion

Upon completion of the audit, the audit team conducts a formal out-briefing to share the results of the audit with the college. This typically takes place on the last day of the audit and provides the campus with an opportunity to ask questions, see how effective its preparations were, and learn what is needed to meet and sustain compliance after the auditors are gone.

The success of an audit is measured not only by the number of findings it generates, but by how well it prepares the campus for the future. CUNY's objective is to use these audits as learning tools, and as a means to ensure that compliance becomes an integral part of the CUNY culture.

Disclosing Audit Results to EPA

Under the CUNY-EPA agreement, the university submits audit disclosures to EPA on a semi-annual basis, at the beginning of February and the beginning of August.

From the end of each audit to the next submission deadline, all the data that were collected during the audit are re-evaluated, amended as appropriate, and incorporated into a disclosure report that follows an approved EPA format.

The CUNY general counsel then distributes a draft report to the campus for final comments and approval. Once this process is completed (which typically can take several weeks), the disclosure report is submitted to the president of the audited campus for final review and approval.

This final approval consists of the president's signature on a form acknowledging the veracity of the audit report. This acknowledgment is then countersigned by the university director of environmental health and safety, who is the designated official under the CUNY-EPA agreement.

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Continuous Improvement

Corrective Action

Once the audit is over (and sometimes even while it is still under way) the corrective action phase begins. Internal assessments of the audit findings are conducted and corrective action responsibilities are assigned.

Some types of corrective action require capital equipment to be installed, repaired, or replaced. Others require the college to hire contractors to conduct environmental sampling and analysis. Still other forms of corrective action are operational (such as labeling, recordkeeping, and training) and can be done by campus personnel.

CUNY is obligated to track corrective action and report its status to EPA in the semiannual disclosures. Corrective action information currently is maintained in a central database. Ultimately, all of these data will be included in a CUNY-wide environmental management system (EMS). The EMS will provide both consolidated and site-specific data that can be used to demonstrate current regulatory status and set improvement targets.

CUNY Environmental Health and Safety Council Meetings

Audit findings are discussed in detail at monthly meetings of the CUNY-wide Environmental Health and Safety Council. These meetings provide an opportunity for the EHS officers and staff from all of CUNY's 19 campuses to exchange information. They are now a formal component of the CUNY environmental health and safety system.

The council meets over lunch on the second Thursday of every month from noon to two, with a different campus serving as host each month. The meetings consist of approximately one hour of CUNY EHS business and one hour of training on a relevant EHS issue.

These meetings provide an opportunity for EHS officers to share in lessons learned by other colleges so that they can avoid repeating prior mistakes. The council meetings have been invaluable in helping CUNY improve from audit to audit.

New York Campus Environmental Resource Meetings

Every two months, there is also a meeting of the New York Campus Environmental Resource (NYCER), a consortium of colleges, universities, and teaching hospitals with campuses in the New York City metropolitan area. In addition to the CUNY campuses, approximately 30 other institutions regularly participate in these meetings.

The structure of the meetings is similar to that of the CUNY EHS council meetings. There is an exchange of information for approximately one hour and a training session for approximately one hour. Member campuses take turns hosting the meetings.

The interaction that results from discussions, information sharing, and training at the NYCER meetings has helped everyone. In addition, the networking fostered by NYCER has resulted in considerable interaction and cooperation among participating campuses, and has also presented opportunities to expand beyond EHS into other areas, such as emergency management and public safety.

At a time when colleges and universities must compete for students and resources, it is remarkable that there is so much cooperation in the EHS arena. Campuses even acknowledge past shortcomings so that others can avoid repeating them. The level of interaction and information exchange generated through NYCER has been extraordinary. It has be-

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come an unanticipated side benefit of the EPA College and University Initiative.

Measuring the Success of the Audit Program

Why Measurement Is Challenging

In the business world, success inevitably is measured by profitability. If you are doing well, you will have an easy-to-measure bottom-line result.

In the field of environmental health and safety (which is considered to be a cost center in most organizations), success often is measured not

in profitability, but in cost avoidance. If your EHS people are doing a good job, you are less likely to be fined by regulatory agencies, less likely to have environmental spills and releases or workplace injuries, and less likely

to be sued successfully.

It is very hard to quantify cost avoidance in a meaningful way, however. By extension, it is very hard to measure the success of an audit.

CUNY's Measurement Tools

After two years of auditing, CUNY is still developing effective measurement tools, two of which seem to be gaining traction. The first involves comparing audit findings for each campus against the potential fines associated with them. The second involves implementing a comprehensive environmental management system.

The first measurement method is valuable because it provides an indication of how EPA (the ultimate arbiter) thinks CUNY has been doing. As noted earlier, CUNY submits its audit disclosure report to EPA twice a year. To date, CUNY has submitted eight reports and has received six responses from the Agency.

In its responses, EPA has reviewed the audit findings that were submitted, evaluated the fines and penalties associated with each, and assigned dollar values to them. Even though all the fines and penalties are waived, having EPA delineate each one provides CUNY with a benchmark against which to measure campus performance, and a critical reminder of CUNY's potential liability.

Having the fines waived is a relief, but it is not a vindication. It is understood throughout the CUNY system that these fines could still be levied if the university does not complete necessary corrective action or if it fails to meet any of the other obligations of the CUNY-EPA agreement.

A variation on this measurement tool is simply to compare the number of audit findings at various campuses. Clearly, those campuses with fewer findings have earned certain bragging rights. But comparing findings in absolute terms can be misleading.

The earliest audits found that many CUNY colleges needed to ensure that all regulated activities were permitted, registered, and recorded, as required. Once these shortfalls were identified, CUNY began to "fast track" these compliance activities. As a result, the campuses being audited two years later tend to be further along than the earlier campuses.

While this result may validate the reasoning behind the EPA College and University Initiative (the audit program is not designed to trap campuses, but rather to provide them with the impetus to achieve and sustain compliance), it does not provide a precise benchmark. To achieve this purpose, CUNY has undertaken to implement a comprehensive EMS—something that would have been difficult to do prior to the audit program.

CUNY has selected a software platform to pilot test an EMS program at one of its campuses. The pilot test is still in progress, but CUNY expects the EMS to help track compliance uniformly throughout the university and to provide

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an internal management tool for each of the CUNY campuses.

Achievements and Next Steps

Participating in an environmental audit, like writing a PhD dissertation, is good to have behind you. The audit itself generates a certain amount of anxiety, but it also provides a number of tangible benefits.

The pre-audit preparation at each campus is intense and emotionally fraught. But when the preparation is done, the campus is cleaner and closer to full compliance.

The daily audit out-briefing debates have turned into shouting matches on several occasions. But when they are over, all parties have a better understanding of the relevant requirements.

The end of the audit is awaited with great anticipation. But the relief is short-lived because the audit is followed by months of corrective action and follow-up activities.

The submission of the audit disclosure report to EPA provides some closure, but only until the Agency response arrives. And as soon as EPA's response is reviewed and evaluated, it is time to start preparing for the next audit. The cycle seems never-ending.

Still, it is important that CUNY focus on its EHS future in a strategic way. Although it is very difficult to think strategically while you are in the midst of an audit, failing to do so may cause most EHS efforts to be merely reactive. In a university as large and complex as CUNY, crises and emergencies are unavoidable, but they should be the exception, not the rule.

Causes versus Outcomes

You don't have to be Jack Welch to understand that people will pay the most attention to those indicators on which they will be evaluated. Just as employees focus on job performance indicators and students focus on syllabus require-

ments, campuses will focus on the environmental health and safety indicators on which they think they will be judged.

Unfortunately, on most campuses today (and CUNY is probably no exception) there is a common and understandable message being delivered: If you want to have a successful audit, have fewer findings and fewer fines than the previous campus.

It is hard to argue with the premise that fewer findings are better, but the message should focus more on root causes than on outcomes. As suggested above, comparing findings and fines across campuses is at best an imprecise measure, and potentially antithetical to the goal of continuous improvement. We need indicators that will foster a commitment to compliance, as well as a fundamental change in the environmental culture of the university.

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Integrating EHS Indicators into General Management

In recent years, much has been written about the potential for linking environmental health and safety indicators with general management indicators. The literature provides many explanations as to why EHS indicators have remained separate. The bottom line, however, is that as long as EHS indicators are seen as distinct from other management indicators, they will be harder to improve.

ISO 14000 and other systemic approaches to environmental quality have made inroads in this area. Still, if we want people to focus on EHS indicators, these indicators must be linked to something that will truly grab their attention.

CUNY has not yet linked environmental health and safety indicators to its basic management systems in a comprehensive manner, but it has attempted linkage in two important areas.

- ***Including EHS Criteria in Presidential Performance Evaluations***

The first linkage involves including environmental health and safety criteria in the performance evaluations of college presidents, each of whom is evaluated annually based on the performance of his or her campus.

Although it would be unfair to suggest that college presidents are not committed to environmental quality on their campuses, one can argue that they may focus more keenly on specific indicators now that defined EHS criteria are considered when evaluating their performance.

- ***Gaining Insights from the CUNY-wide Productivity Program***

The second linkage opportunity involves the CUNY-wide productivity program. From its inception, the CUNY productivity effort has included EHS activities, such as chemical management, hazardous waste management, and electronic waste recycling. Now, as part of the audit program's commitment to continuous improvement, the Environmental Health and Safety Council has invited the CUNY productivity coordinator to participate in discussions and offer ideas on how to incorporate best management practices into EHS compliance activities.

Productivity in the environmental field is no different from productivity anywhere else: All CUNY units want to be able to perform at a high level in the most efficient and cost-effective manner.

Moving Quickly—While Adjusting

Naturally, developing useful EHS indicators and an effective environmental management system can be a long and difficult process. But if we

want to reinvigorate CUNY's EHS program, there is no choice but to slog on.

The challenge is to implement systemic change quickly, on the assumption that this will promote more rapid environmental improvement. Going more slowly might cause the university to lose the initiative that it has spent the last two years assiduously trying to gain.

At the same time, CUNY must be willing to test and adjust EHS indicators until it is confident they are the kind of indicators that will foster environmental leadership. After all: What gets measured gets done.

For More Information

More information on EPA's Voluntary Audit Policy is available at <http://www.epa.gov/region02/capp/cip/>. The Web site for the EPA College and University Initiative is <http://www.epa.gov/region02/p2/college/>.

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