



In This Month's Issue

Green Tier Initiative Clings To Life in Wisconsin

Wisconsin Walks Its Talk: Department of Natural Resources Achieves ISO 14001

Introduced Admidst Much Promise, EMAS Fizzles

Gallo Plans To Harvest ISO 14001 Vintage This Summer

Is Your Organization Prepared for the New Standard? Create a Compliance Calendar

Lean & ISO 14001: The Devil Is Still in the Details

Homeland Security Brings Together Safety and the Environment

WASHINGTON, DC — It was difficult to resist such a perfect Fall morning so John H. Bridges III loaded up his Ford Explorer with fishing gear and headed off for what he thought would be just another lazy Sunday not far from here along Aquia Creek.

Bridges never made it to his fishing spot that morning, October 21, 2001. While driving, he received a call from his superiors at the US Postal Service (USPS) and he was soon knee deep in the world's largest anthrax cleanup as incident commander of the Washington, DC, Processing and Distribution Center "Brentwood."

"I pretty much stayed at the site for the first week. I didn't even go home," recalls Bridges, who would spend much of the next year overseeing the massive cleanup involving some 200 scientists, engineers and workmen.

"If you think we had a threat, you should have gone in my car a week later with all the bait I had there," he says with a smile.

One of the largest mail processing and distribution facilities in the US capital, Brentwood's

entire mail processing activity was effectively shut down by two letters bearing deadly anthrax spores. Lacking even the most basic procedures for such a contingency, Bridges turned to what many experts might have viewed as an unlikely solution — ISO 14001 documentation he created for another mail-processing facility in nearby Gaithersburg, Maryland.

Within a short time Bridges got the confirmation he was looking for — that each of the 17 requirement elements of the international environmental management system standard (Section 4) have a synergistic relationship and, indeed, could potentially play a vital role in the rapidly evolving world of Homeland Security post 9-11.

"We found that we didn't have document control. We didn't have established procedures to do a lot of our response actions" at the contaminated facility, says Bridges, now environmental programs analyst with the Postal Service.

Workers Died

Two workers died after being exposed to inhalation anthrax at the Brentwood facility and 20 others were infected when contaminated letters addressed to US Senate Majority Leader Thomas A. Daschle (D-
(See **USPS** continued on page 2)



USPS

(Continued from page 1)

SD) and Senator Patrick J. Leahy (D-VT) passed through the facility, which was later renamed for the slain employees: Joseph P. Curseen and Thomas L. Morris Jr.

"The framework would help you help develop what is applicable to a chemical attack or a biological attack or a radiological attack," says Bridges. "That management systems approach, whether it's an 'E' for environmental systems or an 'E' for emergency preparedness, can help you really capture what you're trying to do during any national emergency or response endeavor."

Relevant Requirements

The most relevant requirements of ISO 14001 include the sections on legal and other requirements, emergency preparedness and environmental impacts and aspects.

"You may not think about this but if you have a large swimming pool within your organization, don't they normally store chlorine there?" he asks. "The environmental management system, once you've identified your chlorine (as a significant environmental impact or aspect), would help you build security measures and prevention programs in case you had an incidental release."

In the case of the borrowed ISO 14001 documentation, it included an extensive list of agencies to contact as part of an emergency response involving a postal facility. That piece alone would have taken hours, if not days, to construct in the heat of a response, a fete that did escape even the attention of the White House.

White House Takes Note

"To us, ISO 14000 and the EMS model that it represents is one of the best management systems tools to address environmental issues, but still remain efficient and accomplish our agency missions," acknowledges Ed Piñero, Deputy Federal Environmental Executive in the Office of Federal Environmental Executive — White House Task Force (Executive Office of the President).

"We see the Plan-Do-Check-Act Model as a more efficient way to manage environmental issues," says Piñero, who at one time participated in the drafting of the ISO 14000 standards. "Using an EMS to manage environmental issues is the first step of the journey where we can use that model to manage other issues. We see health and safety and security issues as being the next two logical areas to apply that EMS model."

Joe Cascio, who until late last year headed US participation on the

international technical committee responsible for the ISO 14000 standards, agrees that Homeland Security includes many environmental issues. "They're not persistent environmental issues but you could have environmental catastrophes," he says. "A dirty bomb is fundamentally a very bad environmental issue."

Perhaps, the greatest potential for ISO 14001 in the war against terrorism is as a structure for organizing programs that react, mitigate or respond to such issues, according to Cascio, a consultant specializing in the application of environmental management systems for Booz Allen Hamilton.

Auditing Near Ground Zero

On the morning of 9-11, Jerry Skaggs, a trained ISO 14001 auditor, was performing an audit only four blocks away from the World Trade Center in New York. Even amidst the horrific tragedy and ensuing chaos, Skaggs says, the potential value of ISO 14001 in such an extraordinary event was apparent.

"ISO 14001 auditors have been really approaching this all along because you want to ask the question what is the potential and have you considered 'X,'" says Skaggs, regional program manager for US and Canadian operations involving ISO 14001, occupational health and safety and RC14001 with Underwriters Laboratories Inc., one of QSU Publishing's Big Ten Registrars.

"If there are planes overhead and you're in the flight path of an airport you may want to think about a plane crashing into your building," Skaggs says. "It's not just the Homeland Security, it's looking at the big picture. What are the things out there that could affect you?"

For example, the standard requires organizations to demonstrate that they periodically conduct tests for emergency preparedness and response procedures to the extent practical. "You certainly need to train people as part of the process," he says, explaining that Clause 4.4.2 Training, Awareness and Competency requires organizations to demonstrate that personnel whose work may create a significant impact on the environment receive appropriate training.

"If you are an emergency responder, the standard is saying you need to receive the appropriate training. And emergency responders may have different levels," says Skaggs, who was among the featured speakers at a Homeland Security conference in Orlando this month that was to be held in conjunction with the International Conference on ISO 9000. "You need to receive the training that's appropriate to what your level of involvement is."

(See **USPS** on page 3)

Start Your *Environmental Systems Update* Subscription Today!

YES! I want news, analysis, strategies and guidance to implement and maintain ISO 14001 registration. I would like to subscribe to *Environmental Systems Update* (12 issues for \$375).

Please send me more information.

Four Ways To Order

Mail: Request form to: QSU Publishing Company
3975 University Drive, Suite 230
Fairfax, VA 22030

Fax: 703-359-8462

Tel: toll-free 1-866-225-3122 or 703-359-8460

Web: www.qsuonline.com

Name _____

Organization _____

Address _____

City _____

State _____

Zip _____

Telephone _____

Fax _____

E-Mail _____

Method of Payment

Payment enclosed (make check for \$375 plus applicable sales tax payable to QSU Publishing Co.)

Charge my: VISA MasterCard American Express

Card # _____ Exp. ___/___

Signature _____

Bill me



Government Agencies on Front Lines

As in the case of the Postal Service, US federal government agencies are likely to find themselves on the front lines of Homeland Security issues.

Executive Order 13148, The Greening of Government Through Environmental Leadership, requires federal facilities to implement environmental management systems by the end of 2005 at all applicable facilities and Skaggs sees an obvious connection with ISO 14001.

"There's lots of different parts of the standard that when you start tying it together again you're able to meet the requirements of ISO 14001, Homeland Security and then, oh by the way if you are a federal agency, you have this requirement to do it anyway under Executive Order 13148," says Skaggs. "You can have three approaches or you can have one approach. Having one approach is certainly more desirable than having three systems that may not talk to each other."

Government personnel implementing contingency plans will clearly benefit from training on ISO 14001, but not necessarily third-party certification of their facilities, according to Cascio, who believes the security concerns would be too great.

"We're talking about using the 14001 framework as a vehicle, as a tool to prepare for emergency situations such as an attack," he says. "They're not going to take their contingency plans and get them certified. You might as well invite Al Queda to Sunday brunch at the House."

Exponential Growth Expected

Piñero notes that some 200 federal sites have already reported fully implemented environmental management systems, of which about 20 have attained formal certification to ISO 14001. While the use of ISO 14001 was not mandatory, most of the remaining sites chose to implement ISO 14001 but did not seek certification, he says.

Many more sites are likely to complete their implementations by the end of 2005. "There are literally hundreds of federal facilities that are right now in the implementation stages," he says. "The rate of implementations in the Federal community seems to be following a vertical exponential growth curve."

The Brentwood response involved quickly establishing a perimeter around the 17.5 million-cubic-foot plant to protect both the facility's 1,600 employees and the community at large and then building an elaborate chemical delivery system to carry just enough chlorine dioxide gas to kill the anthrax spores but no more than necessary, and then to keep it from escaping into the surrounding environment where the effect could have been devastating if not properly managed.

Dubious Distinction

The sheer volume of chemicals needed for the operation gave Brentwood the dubious distinction at one time as being the largest storage facility of its kind on the East Coast with about 60 tank trucks, each containing about 4,500 gallons of chemicals.

The project took the installation of some 21 miles of plastic tubing and more than 250 separate tests. After nearly a year of meticulous preparation, it took just one treatment of the gas to rid the facility of the deadly substance, a process that went much more smoothly at Brentwood, a much larger facility than on Capitol Hill, where it took

several attempts having not had the same benefit of ISO 14001 planning.

The General Accounting Office has issued several critical reports on the handling of Homeland Security issues, notes Bridges. "They're findings suggest you could fix those through the proper utilization of an EMS management system."

How ISO 14001 Measures Up for Homeland Security

The US Postal Service (USPS) examined the following 17 requirements of ISO 14001 for relevance to Homeland Security issues. Here's how they were deployed by the agency in what became the world's largest anthrax removal.

Element 1 (Environmental Policy) requires that an organization create an environmental policy. USPS developed and followed an environmental policy at the Brentwood site. The policy was available to all employees and those doing work for USPS on-site.

Element 2 (Environmental Aspects) requires an organization to identify environmental characteristics of their products, activities and services and determine what associated significant aspects they could have, if any. USPS reviewed the possible aspects of the decontamination operations and developed programs to address them. In implementing and maintaining the EMS, USPS reviewed the possible aspects associated with the cleanup process and their potential impacts on the environment.

For the fumigation of the building, it determined that air emission and wastewater were two potentially significant aspects. Air emission resulted from on-site electric generators and the use of chlorine dioxide gas. Wastewater was associated with the fumigation process. Once these aspects had been identified, USPS took all appropriate steps to minimize its impact on the environment by setting objectives and targets and establishing processes for personnel training and awareness, communications, operational controls and monitoring and measurement.

Element 3 (Legal and Other Environmental Requirements) requires an organization to identify and ensure access to applicable legal and other environmental requirements to which the organization must adhere. USPS researched legal and other requirements when selecting and implementing a remedy by consulting their contractors and using the experience and knowledge of the incident commander.

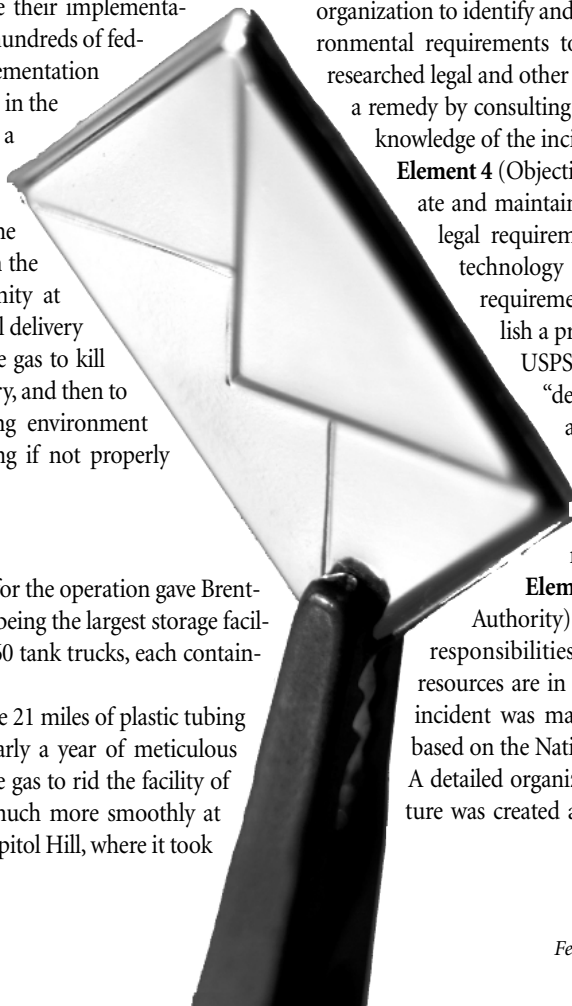
Element 4 (Objectives and Targets) requires an organization to create and maintain a list of objectives and targets consistent with legal requirements, significant environmental aspects, USPS technology options, financial, operational and business requirements and the views of interested parties to establish a program for achieving the objectives and targets.

USPS created a list of objectives and targets for a "decontaminated site" and used the list in selecting a remedy (i.e., chlorine dioxide fumigation of the entire facility), developing a delivery mechanism for delivering the chlorine dioxide and evaluating the effectiveness of the selected remedy after the fumigation was complete.

Element 5 (Resources, Roles, Responsibility and Authority) requires an organization to define the roles and responsibilities in environmental management, ensure resources are in place and authority is established. The anthrax incident was managed using an Incident Command Structure based on the National Contingency Plan.

A detailed organizational chart of the Incident Command Structure was created and posted to ensure all participants at the site

(See USPS on page 4)



USPS

(Continued from page 3)

were familiar with and adhered to the chain of command. In addition to other responsibilities, the Incident Commander was given responsibility for establishing, implementing and maintaining the EMS and reporting on the EMS performance to top management.

Element 6 (Competence, Training and Awareness) requires an organization to train any persons performing tasks that may cause significant environmental aspect(s) to perform their environmental responsibilities in accordance with the EMS standards and to make employees aware of EMS requirements. USPS developed a 15-minute training course identifying risks and hazards. Anyone entering the building was required to have 40-hour HAZWOPER training and to wear personal protective equipment.

Element 7 (Communication) requires an organization to create and maintain procedures for internal and external communication on environmental management issues. The procedure for communication with external parties was based on existing USPS procedures. The incident commander developed processes and procedures to keep those working on site aware of key events.

Element 8 (Documentation) requires an organization to maintain documentation and records required by the standard and related documents. The incident commander developed and maintained a file of procedures that documented the EMS.

Element 9 (Control of Document) requires an organization to maintain and control documents required by its EMS and the standard. USPS developed a careful, elaborate document control system and controlled access to the documents.

Element 10 (Operational Control) requires an organization to identify, plan and manage its operations and activities according to the environmental policy, objectives and targets. The potential for air emission resulting from the fumigation process was a significant aspect. Operational controls were established and maintained to prevent releases. Systems were put in place to monitor possible releases.

Element 11 (Emergency Preparedness and Response) requires that an

organization respond to emergency situations and mitigate environmental impacts; identify potential emergency situations and determine how the organization would address them; and test emergency response procedures where practical. USPS developed a detailed emergency response plan for the fumigation process that outlined possible worst-case scenarios and how USPS would address them.

Element 12 (Monitoring and Measurement) requires that an organization regularly monitor and measure key characteristics of their operations that can significantly impact the environment and to calibrate and maintain all associated equipment. USPS carefully monitored the effectiveness of the remediation activities. Through sampling, it was able to measure the effectiveness of the remedy against established targets and performance measures.

Element 13 (Evaluation of Compliance) requires an organization to assess the organization's compliance with applicable environmental legal requirements. USPS conducted frequent reviews of applicable legal requirements throughout the incident to ensure compliance.

Element 14 (Nonconformity and Preventive and Corrective Action) requires an organization to identify and correct actual and potential nonconformities, investigate the causes and review the actions taken. USPS ensured that action was taken whenever protocols and procedures were not followed, up to and including dismissal from the site when necessary.

Element 15 (Records) requires an organization to create and maintain records that demonstrate conformity to the EMS and the standard. USPS developed a careful, elaborate record control system and

controlled access to the records.

Element 16 (Internal Audit) requires an organization to conduct internal audits of the EMS to ensure conformity with the EMS standard. The EMS was reviewed by contractors involved in each phase of the planning, fumigation and restoration of the Brentwood facility.

Element 17 (Management Review) requires an organization to conduct management reviews of the EMS to ensure its effectiveness, focusing on continual improvement. USPS management met frequently to review Brentwood's EMS.

USPS took all appropriate steps to minimize its impact on the environment by setting objectives and targets and establishing processes for personnel training and awareness, communications, operational controls, and monitoring and measurement.

To request a sample issue of
Environmental Systems Update
Call (toll free US only)
866-255-3122
or 703-359-8465.

Discover other
QSU Publishing Products
at www.qsuonline.com



www.WhosRegistered.com

WhosRegistered.com puts
ISO 14001 and ISO 9000
certified companies at
your fingertips.