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Why Bother with ISO 14001?

As of June 1999, some 25,000 organizations in the United States had been certified to one of the ISO 9000 quality standards. Of these, however, only about 340 have obtained ISO 14001 certification. You may be asking yourself, "why haven't more American businesses jumped on the ISO 14001 bandwagon?"

Gary Roper, who obtained the first ISO 14001 certification for a circuit board manufacturer in Texas, believes that, "too many companies think they have to need customers in Europe or Asia before ISO makes business sense."

What many environmental managers and business executives don't realize is that many of the elements required for ISO 14001 certification may already exist as a part of the company's environmental compliance effort. Actually, ISO 14001 will help you tie all the pieces together.

Following on the coat tails of the ISO 9000 standards for quality management, the ISO 14001 standard challenges companies to take their existing environmental management systems (EMS) to a higher level. Both ISO standards provide a systematic method for controlling operations and improving performance through meeting objectives. By being proactive in setting environmental targets and objectives, a firm can reduce its negative impacts on the environment while reducing

costs.

So, what is an environmental management system (EMS)? An ISO 14001 EMS is a fully documented system complete with an environmental policy, an organizational structure, responsibilities, procedures, and resources that support a systems-based approach to environmental management.

"Be ISO 14001 compliant for your own peace of mind, be ISO 14001 certified if it makes business sense."

Gary Roper
Director of Operations
Substrate Technologies, Inc.

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Outside the Box

What's "Cheap"?



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Zephyr is a professional services firm providing consulting, training and software to the industrial, commercial and public sectors. The firm's major areas of practice focus on environmental permitting, compliance and corrective action, incident management, occupational health and safety, risk assessments, ISO 14001 implementation, audits and regulatory tracking.

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In the January 1999 edition of *Currents*, we began to examine our common challenge as EH&S managers to meet the impossible standard of doing our jobs "fast, right, and cheap." In April I suggested the importance of using professional judgment, with an emphasis on professional, in our struggle to get the job done "right." This month, let's explore what it means to do the job "cheaply."

From EH&S staff costs — to environmental consultant costs — to pollution control equipment costs — to administrative costs, no good project goes unpunished. Often, all or a portion of these "hidden" costs are overlooked in the initial planning stages of the project. And when you, as the EH&S manager, bring them to the project manager's attention, the reception is often less than cordial.

At the outset, "cheap" is really a poor choice of words; the first thing that may come to mind is providing substandard work at a "bargain basement" price. However, a more positive spin on the concept of keeping it "cheap" is this: Performing your job in a manner that results in the maximum net financial benefit over the long term.

Consider the ISO 14001 standard, highlighted in this month's feature article. This voluntary international environmental standard encourages industry to "design for the environment" and to create and implement systems for managing environmental affairs, not only to protect the environment, but also to save money. Increasingly, the highest levels of management in American industry are adopting the principles espoused in ISO 14001. Not surprisingly, they frequently

reap added financial benefits from an efficient, proactive approach to environmental protection: 1) it costs less money to do business, and 2) doors open to new business opportunities.

How can you use the proactive approach to environmental management to deal with the everyday struggle to save costs? Begin at the top, educating your management on the importance of integrating the process of environmental management with the process of doing business.

According to Marilyn R. Block, a U.S. delegate to the International Organization for Standardization (ISO) environmental subcommittee, "Emphasis on prevention of pollution can reduce costs in two ways: decrease expenditures on raw materials and decrease waste disposal costs. Efforts to prevent pollution encourage attention to the toxicity of materials used in operating processes and other activities. This can result in more efficient use of toxic materials or their elimination through material substitution. Cost savings also may be realized in reduced fines and/or penalties."

From the "energy crisis" of the 1970's, industry has learned how to save money by conserving energy. It's not a long stretch to appreciate how costs can be reduced and profits increased through recycling, process efficiency improvements, and other proactive approaches to "design for the environment."

- David Cabe, P.E.
Zephyr Environmental Corporation

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Chances are that many companies have some or all of these elements already in place. How well does your environmental management system conform to the ISO 14001 Standard? The proof lies in how well and to what extent your EMS has been documented.

Almost any size company can align its existing management system with the ISO 14001 standard. Benefits of taking this step include:

1. **Design for Environment** – DFE is a new way of doing business based on the use of environmentally friendly equipment, processes, and services. ISO 14001 provides a system that supports DFE.
2. **Ability to Conduct Business Globally** – Companies operating globally are beginning to see more customers require ISO 14001 certification from their vendors, which in turn could “trickle down” to other vendors in the supply chain.
3. **Employee Involvement** – ISO 14001 motivates employees to identify potential environmental impacts of processes and work practices and to look for pollution prevention opportunities.

By being proactive in setting environmental targets and objectives, a firm can reduce its negative impacts on the environment while reducing costs.

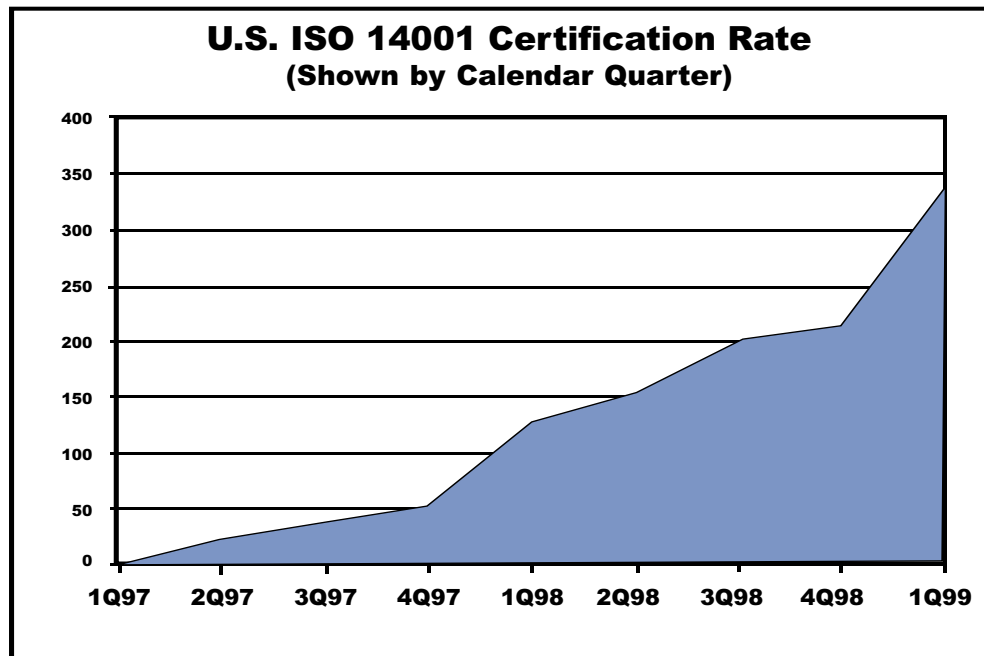
4. **Pollution Prevention** – ISO 14001 elevates pollution prevention projects to the level of company-wide goals, thus promoting waste reduction throughout the facility.

5. **Cost Savings** – ISO 14001 generates cost savings company-wide through pollution prevention projects and process re-design. These cost savings could even offset the cost of implementing ISO 14001.

6. **Good Corporate Citizenship** – ISO 14001 certification provides a “green stamp” that your stakeholders and the environmental regulators will recognize and appreciate.

It may not seem to make business sense right now for your company to spend money for ISO 14001 certification; however, conforming your EMS to the ISO 14001 standard will enhance your company’s compliance and pollution prevention programs and, in turn, reduce the overall cost of doing business.

*- Jeanne Yturri & Julie Jumonville
Zephyr Environmental Corporation*



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News Briefs

TNRCC Reorganizes

On June 28, 1999, the Texas Natural Resource Conservation Commission abolished its offices of Air, Water, and Waste. All permitting programs within the agency are now under a new Office of Permitting, directed by Leigh Ing. In addition, agency-wide planning and assessment activities were placed under a new Office of Environmental Policy, Analysis, and Assessment, directed by Randy Wood. Jeff Saitas, the TNRCC Executive Director, announced that these changes were implemented to establish uniform and consistent permitting processes in one office and to provide a single point of contact for agency permitting and planning processes. He added that further agency restructuring is planned.

Governor Signs Grandfathered Source Permitting Bill

On June 18, Governor Bush signed Senate Bill 766, placing greater pressure on grandfathered sources to "volunteer" for air quality permits. The final version of the bill makes provisions for grandfathered air emissions sources to obtain a "voluntary emissions reduction permit" or VERP. A key provision of this law is that on or after September 1, 2001, grandfathered facilities will be required to pay a fee, which will triple each year, for annual emissions in excess of 4,000 tons. By imposing fees without mandating permits, the legislature has succeeded in retaining the voluntary nature of the permitting program for grandfathered sources while providing a mechanism to penalize the largest emitters for not securing permits. For more information, call David Cabe at (512) 329-5544.

Promotion of Public Participation in Permitting Passes

With the signing of House Bill 801 on June 19, the public will be provided the opportunity for greater participation in environmental permitting decisions with little relief for industry from the protracted and costly public hearing process. Origin-

nally envisioned as an opportunity to address public environmental concerns outside the adjudicatory hearing setting, the law as enacted primarily provides the public another opportunity, through the venue of informal public meetings, to affect the Executive Director's the decision to issue or deny environmental permits. Regardless of the ED's decision, the public may still request that the commission reconsider the decision whether or not to hold a contested case hearing. On July 7, the TNRCC proposed new rules to implement the new law. For more information, call David Cabe at (512) 329-5544.

Federal Court Strikes Blow to EPA's New Ozone and PM2.5 Standards

On May 14, the U.S. Court of Appeals remanded EPA's new ambient air quality standards for ozone and fine particulate matter (PM2.5) ruling that EPA's rulemaking was an unconstitutional assertion of legislative authority. The Court has instructed EPA to develop new standards, claiming that EPA had not clearly defined the unacceptable health effects and acceptable residual risks in setting the standards. Pending EPA appeal of the court ruling, the new ozone standard remains in place; however, state agencies are unsure whether to press forward with the development of State Implementation Plans (SIPs) that comply with the new standards.

Bill Limits Access to Risk Management Program Offsite Consequence Analysis Results

On June 23, the United States Senate passed a bill limiting access to information about chemical accident scenarios (e.g., offsite consequence analysis information for worst-case and alternative case scenarios). If, at the end of one year, a rule has not been promulgated, the information will become subject to Freedom of Information Act (FOIA). If a rule is promulgated, however, the information would be exempt from the provisions of the FOIA for six more years. The bill has been sent to the U.S. House

july news briefs...

TNRCC Reorganizes

NESHAP Adopted for Oil and Natural Gas Production and Transmission Facilities

EPA Rejects Ozone Control Plan and Rescinds NO Exemption for DFW

EPA Proposes Change to Beaumont/Port Arthur Ozone Nonattainment Status

EPA Issues Texas Petroleum Bulk Terminal NPDES General Permit

OSHA Proposes Ergonomics Standard

Governor Signs Grandfathered Source Permitting Bill

Promotion of Public Participation Permitting Passes

EPA Promulgates Polyether Polyol MACT Standard

Federal Court Strikes Down EPA's New Ozone and PM2.5 Standards

TNRCC Adopts Gasoline Controls for Eastern Third of Texas Counties

EPA Pushes for State Air Permit Conditions in Title V Permits

EPA Updates TANKS Emissions Calculation Software

Bill Limits Access to Risk Management Program Offsite Consequence Analysis Results

of Representatives for review.

EPA Rejects Ozone Control Plan for DFW

On June 2, EPA released its finding that Texas failed to submit the required SIP for the Dallas/Fort Worth (DFW) serious ozone nonattainment area. EPA found that the State did not demonstrate that its proposed control plan would result in attainment by November 15, 1999. EPA also found that the State's Rate of Progress (ROP) Plan did not demonstrate the minimum three percent-per-year emission reductions (after accounting for growth) for 1997 to 1999 as required by the Clean Air Act (CAA). If EPA receives no acceptable plan from Texas within two years, a Federal Implementation Plan (FIP) will be required for the area.

EPA Proposes Change to Beaumont/Port Arthur Ozone Nonattainment Status

On April 16, EPA proposed to find that the Beaumont/Port Arthur (BPA) moderate ozone nonattainment area has failed to attain the one-hour ozone National Ambient Air Quality Standard (NAAQS). This determination was based on EPA's review of air quality monitoring data for the area. EPA will only finalize the proposal if the State of Texas does not submit, by November 15, a SIP that meets EPA's July 1998 transport policy. If the proper SIP is submitted, EPA intends to extend the area's attainment deadline, thereby keeping the BPA from being reclassified as a serious nonattainment area.

TNRCC Adopts Gasoline Controls for Eastern Third of Texas

On June 30 the TNRCC approved a rule requiring the use of Stage 1 vapor recovery equipment at large retail gasoline outlets and bulk terminals, and the sale of cleaner gasoline in portions of Texas east of I-35 and I-37. Beginning in 2000, gasoline sold in these areas between May 1 and October 1 must have a Reid Vapor Pressure (RVP) of no more than 7.8 pounds per square inch (psi). Furthermore, by January 1, 2004, sulfur in gasoline will be capped at no more than 150 parts per million (ppm). Conventional gasoline has a RVP of 8.5 to 9 psi and an average sulfur level of 300 to 330 ppm. The new rule neither mandates nor prohibits the use of the gasoline additive MTBE. For more information, call Art Bedrosian at 512-329-5544.

EPA Pushes for State Air Permit Conditions in Title V Permits

In a March 31 letter to the California Air Pollution Control Officers Association, EPA stated that all terms of state permits issued under a SIP-approved program must be listed in the federally enforceable portion of the Title V operating permit. Conversely, EPA stated that if a state does not want a SIP provision or a SIP-approved permit condition to be

listed as a applicable requirement in the operating permit, it must delete those conditions from its SIP or from the SIP-approved permit. This EPA position has not been well received by many state agencies and industry groups and does not bode well for the TNRCC in its attempt to protect its minor new source review permitting program from more federal control.

NESHAP Adopted for Oil and Natural Gas Production and Transmission Facilities

On June 17 EPA promulgated the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for oil and natural gas production, transmission, and storage facilities. The rule is designed to control hazardous air pollutants (HAPs) — primarily benzene, ethyl benzene, toluene, and xylene (BETX) and defines MACT standards for glycol dehydration units, storage tanks with potential flash emissions, and piping components in HAP service. In general, regulated units will be required to demonstrate either 1) a minimum 95-percent emissions control, 2) an exhaust concentration of HAPs of less than 20 ppmv, or 3) a benzene emission of less than one ton per year. For more information, call Bob Henderson at (713) 977-8797.

EPA Promulgates Polyether Polyol MACT Standard

On June 1, 1999, EPA promulgated the MACT Standard for polyether polyol production facilities. The new rule covers emissions from storage vessels, process vents, heat exchange systems, equipment leaks, and wastewater operations. For more information visit www.epa.gov/ttn/oarpg/t3pfpr.html or contact Jennifer Junker at (512) 329-5544.

EPA Issues Texas Petroleum Bulk Terminal NPDES General Permit

Owners and operators of petroleum bulk stations and terminals in Texas can now claim a specific National Pollutant Discharge Elimination System (NPDES)

general permit for authorization of wastewater and contact storm water discharges from their facilities. This general permit (TXG340000), which becomes effective on July 26, 1999, imposes specific discharge limitations and requires that pollution prevention plans for storm water discharges be developed and implemented. For more information, call Jerry Kung at (512) 329-5544.

OSHA Proposes Ergonomics Standard

After ten years of development, OSHA has finally released a draft of its new ergonomics standard. To comply with the standard, employers would be required to develop and implement programs that ensure both management and employee participation; provide for the identification, analysis, documentation and control of hazards; provide for training on ergonomically safe work practices; and provide for medical surveillance and management of employees. The proposed standards would apply to all industries where musculoskeletal disorders have been reported. A copy of the draft proposed rule is available at www.osha.

EPA Updates TANKS Emissions Calculation Software

On June 15, EPA released an upgraded version of its *TANKS* software program for estimating emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) from fixed- and floating-roof storage tanks. The software improvements, released as Version 4.02 of *TANKS*, include a new windows based platform, updated meteorological data, the ability to add loss factors for floating roof tanks, revised chemical speciation profiles, interaction with Microsoft ACCESS 2.0, and Y2K compliance. For more details on *TANKS 4.02* call Maria Gou at (512) 329-5544 or download the program at www.epa.gov/ttn/chief/.

On the Web

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