

zephyr®

Currents

a quarterly publication of zephyr environmental corporation

No Free Refills – Techniques for Sustainable Water Management

The concepts of water supply, water use, and water management — particularly *sustainable* water management — are rarely discussed except when water is in short supply. Beyond the household tap, most of us do not think about where our water comes from or what may happen to it once we've used it. However, these are critical considerations for municipalities, industry, agriculture, and for the environment.

Progress has been made to improve global water supplies; however, these efforts have not kept pace with population growth and environmental changes. Recognizing this trend, the World Business Council for Sustainable Development estimates that by 2020 approximately two-thirds of the world's population will live in water-stressed countries. Without concerted, collaborative efforts to sustainably manage water, the potential consequences of this trend are severe.

The notion of sustainability varies from person to person and often differs across professional disciplines. Frequently, however, it is taken to mean processes that can be maintained indefinitely — a concept which does not translate well when attempting to balance the competing demands of population growth, economic development, and environmental protection. Instead, a more realistic goal of sustainable water management is to meet the social, economic, environmental, and aesthetic needs of the present without compromising the needs of the future.

Appropriate and effective means to sustainably manage water include the development of appropriate water management plans, the measurement of water use efficiency and wastewater treatment effectiveness, the reduction of pollution at the source, and the assessment of



environmental impacts. To develop a water management plan, the municipal, industrial, commercial, or agricultural entity should understand the entire life cycle of water that it uses, including the character and quantity of the water supplied, used, treated, released, and taken up by the environment. Otherwise, the user cannot ensure an adequate supply of water to meet essential demands, that water will be used effectively, and that it will be handled in a way that minimizes environmental damage. Organizations can develop and implement water management plans at any stage of their operations. New or modified operations present the opportunity to review and revise water management methods before they are implemented, and existing operations can be audited to identify potential improvements in water management.

Application of systems to measure total water use, water use efficiency, and wastewater treatment effectiveness provide much of the information needed to reduce initial water consumption, minimize wastewater production and pollutant loadings, maximize reuse of production water or wastewater, and minimize the impacts of wastewater discharges. An added, but significant, benefit of such measurements is the

refills >>> continued on page 6

FROM THE TRENCHES

It's Just the Cost of Doing Business

Several years ago gas-fired combined/cogeneration cycle turbines were all the rage in Texas. A client of mine had obtained an air permit to construct a large cogeneration turbine project with a capital cost well in excess of \$200 million. However, the business climate changed, as happens from time to time, and the project was placed on hold. In Texas, an air permit will become void if construction is not commenced within 18 months after the permit is issued. The Texas Commission on Environmental Quality (TCEQ) may grant an 18-month extension, if requested by the permit holder, extending the overall period to begin construction to three years.

Fast-forward about two years from the date the air permit was issued and the situation has changed. Upper management wants to continue with the project. Of course, some equipment design changes were made when the project was re-evaluated. These changes required a minor modification to the air permit, and upper management would not proceed without a revised permit in hand. Moreover, if the revised air permit could not be obtained by an internal deadline, the project would be canceled! So the fate of this large project was resting on the environmental department's ability to modify the air permit in a relatively short space of time.

I discussed permitting strategies with the environmental manager and we determined the best path forward to achieve the goals of updating the permit, addressing changes in control technology, and issuing the permit quickly. With a plan in hand the client contacted the TCEQ to set up a meeting to discuss the project. Imagine the sinking feeling in the pit of his stomach when the agency representative responded "Permit? What permit? According to our database it looks like your permit expired six months ago."

But my client knew he had submitted the extension request. A quick look through his records and he found the file copy of the request. So we started searching the agency's file room for the extension request. We found no sign of it in the agency files. However, the client had his copy of the UPS airbill, and it contained a tracking number. Entering the tracking number into the UPS website returned a hit – we now had proof that the request was delivered to the agency by the deadline; we even had the name of the person who signed for receipt of the package. We presented this information to the agency and made a strong argument that the permit should be reactivated. After conferring amongst themselves, the agency accepted our proof and we were able to proceed with the permit modification.

Success was ours! The permit was modified, funding was released, and the units are now up and running. There was no glory in getting the permit modified — that was just our job — but it would've been quite a different story if we had returned to the construction team with no permit.

The lesson learned, and the point behind this article, is that for delivery of important or time-sensitive information you should always use a traceable method such as Certified Mail, FedEx, UPS or other delivery service. Additionally, I recommend typing the tracking number on the cover letter itself. Otherwise you will only have proof that *something* was delivered on a certain day, but not necessarily *what* was delivered on that day. For even more assurance, have your package hand delivered to the agency. From our office in Austin, Zephyr routinely hand delivers applications to the TCEQ and obtains date-received stamped copies of the cover letter for the ultimate proof of delivery.

Yes, it costs more to use a delivery service than regular mail, but consider this:

- Cost of a first class stamp – \$0.41
- Cost of an overnight delivery service – \$25.00
- Saving the project – Priceless

Ed Rapier
Project Engineer



A Call to Chemical Facilities: DHS Wants YOU

Under new rules adopted by the Department of Homeland Security (DHS) a broad range of businesses must notify the government of the existence of certain chemicals they manage. A subset of these businesses will need to assess their vulnerability to terrorism and put into effect security plans. Some deadlines have already passed and stiff penalties can be imposed for failure to meet the requirements.

On April 9, 2007, DHS published its Interim Final Rule: Chemical Facility Anti-Terrorism Standard ("CFATS"), explaining that it would soon be identifying Chemicals of Interest ("COI"), along with a Screening Threshold Quantity ("STQ") for each COI. That COI list was published on November 20, 2007 and is now commonly known as "Appendix A." COI and the related STQ are based on the potential hazard in case of theft, contamination, or sabotage, and borrow heavily from existing Environmental Protection Agency and Department of Transportation programs. Businesses that manage chemicals must look at Appendix A to initially determine whether they are governed by the CFATS rules. For example, a facility that uses chlorine would review Appendix A, determine that the STQ of chlorine (in a minimum concentration of one percent) is 2,500 pounds and then compare that number to the amount the facility has on hand at any given time.

If a business determines that it is affected, i.e., has a COI in excess of an STQ, it must register with DHS through a secure on-line Chemical Security Assessment Tool ("CSAT"), found at www.dhs.gov/chemicalsecurity. Even facilities that are not currently affected must remain diligent in their chemical inventory reviews. Any facility that later obtains a COI in a STQ has only 60 days from the change to register.

The CSAT registration is essentially a "Top Screen" process. DHS estimates that most facilities needing to complete a Top Screen will fall into one of three categories: chemical manufacturing, storage and distribution facilities, petroleum refineries, and liquefied natural gas storage (peak shaving) facilities.

Once DHS has received a Top Screen, the facility can expect to receive a notice from DHS stating that either: (1) the facility will not be governed by CFATS risk-based performance standards (congratulations), or (2) the facility must comply with CFATS risk-based performance standards. This preliminary decision is based on whether DHS believes a particular facility "presents a high level of security risk." Those facilities receiving the "must comply" letter will be assigned an initial "risk-based tier level" — 1, 2, 3, or 4 (with Tier 1 being the highest risk). Each tier level

comes with its own applicable security risk-based performance standards, but these standards do provide some flexibility and do allow a facility to use existing security measures where feasible.

No matter what tier level a facility is assigned, the next step for a covered facility is to complete a Security Vulnerability Assessment ("SVA"). The SVA identifies security measures currently in place, and potential security vulnerabilities. DHS does not allow businesses to map their own SVA; rather, all Tier 1, 2, and 3 facilities must use the DHS created SVA tool, while Tier 4 companies can choose to use an "approved alternate." The SVA must be completed within 90 calendar days of receiving the initial tier designation letter.

After DHS has found the SVA to be sufficient, the facility must prepare, and then implement, a Site Security Plan ("SSP"). The SSP must actively address every security vulnerability identified through the SVA process. The chosen security solution must meet or exceed the nineteen risk-based performance standards for the applicable tier designation. DHS will provide guidance on how to comply with the risk-based standards, and is creating a "template" SSP. A facility has just 120 calendar days from the DHS notice of the initial tier designation to complete the SSP.

Once DHS has found the SSP to be sufficient, the facility will receive a Letter of Authorization. Then, the facility can expect an inspection to assess actual compliance, which will result in a DHS Letter of Approval.

DHS can conduct audits and inspections in the future and can order facilities to cease operations and/or assess up to \$25,000 per day in civil penalties. DHS has set up a Help Desk to answer questions: 1-866-323-2957 or CSAT@DHS.gov.

The deadline to complete the Top Screen CSAT was January 22, 2008, but DHS representatives have noted that significantly fewer facilities registered by the deadline than DHS believes were required to do so. DHS has not officially extended that deadline, but there have been no reported assessments of penalties against late filers to date. Representatives at DHS have indicated that the agency is still considering its options with respect to penalizing late filers. Accordingly, all affected facilities that have not registered are urged to do so at the earliest possible date.

Steve Morton
Janessa Glenn
Moltz Morton O'Toole, LLP

News Briefs

national news

EPA Significantly Tightens Ozone Standard

On March 12, EPA put into effect a significantly more stringent 8-hour ozone standard of 0.075 parts per million (ppm). This new standard represents an approximately 11-percent reduction in the ozone level allowed under the previous standard of 0.08 ppm (effectively, 0.084 ppm, because of the rounding of ozone measurements recorded to three decimal places). The new standard may send more than one hundred new counties into non-attainment status, requiring states to determine county-by-county attainment status by March 2009 and, thereafter, to develop plans to meet the new standard. EPA will issue final designations for most counties no later than March 2010, with the remainder to be designated by March 2011. Newly affected areas in Texas may include Bexar, Travis, El Paso and Orange Counties as well as additional counties near Dallas and Tyler. For more information, contact Jamey Woodall at 512.879.6625 or jwoodall@zephyrenv.com.

Court Vacates Mercury Rule for Utilities

On February 8, the DC Circuit Court of Appeals vacated EPA's Clean Air Mercury Rule (CAMR). Originally mercury emissions from coal- and oil-fired power plants were required to be regulated under a technology-driven MACT rule (Section 112 of the Clean Air Act). However, in 2005, EPA revisited that determination and promulgated the CAMR under a more flexible framework (Section 111 of the Clean Air Act) with a cap-and-trade component. The impact of the vacatur of this rule is uncertain, but if this ruling survives the late March challenge by the Bush administration and any subsequent disputes, EPA will likely be required to develop a conventional MACT rule governing mercury and other hazardous air pollutant emissions from power plants. In the meantime, the Clean Air Act allows for states to impose source-specific MACT limits, although this action will likely trigger legal challenges by utilities. In addition, many states have already adopted state-specific mercury control regulations. For more information, contact Jennifer Seinfeld at 410.312.7915 or jseinfeld@zephyrenv.com.

EPA Reports Recent Decrease in Greenhouse Gas Emissions

On February 22, EPA released a report of greenhouse gas emissions and sinks for the period 1990 through 2006. According to the report, fossil fuel combustion by the electric generation and transportation sectors accounted for about half of the greenhouse gas emissions, reported in terragrams of CO₂ equivalents. Although EPA reports that net greenhouse gas emissions (including sources and sinks) increased over the 16-year period, the studies show that net greenhouse gas emissions have actually decreased by three percent since 2000. EPA ascribes this improvement to decreased fuel consumption due to higher gas prices, lower energy demands during cooler summers, and increased use of natural gas and renewable energy sources in the generation of electricity. For more information, contact David Cabe at 512.879.6644 or dcabe@zephyrenv.com.

DOE Pulls the Plug on FutureGen

On January 30, the Department of Energy cancelled the \$1.5-billion FutureGen Project, previously awarded to the State of Illinois for the construction of the world's first coal-fired, near-zero emissions power plant. In lieu of FutureGen, the DOE opted for what it believes to be a more cost-effective approach — the formation of an advanced coal technology research and development program. This program, which will receive \$648 million in its first year, will focus on supporting multiple commercial-scale Integrated Gasification Combined Cycle clean coal-fired power plants demonstrating new carbon capture and storage technologies by 2015. One day before the decision to cancel FutureGen, Illinois Governor Rod Blagojevich expressed his disappointment in a public statement, calling the DOE decision "an example of politics at its worst". For more information, contact Curtis Harder at 512.879.6643 or charder@zephyrenv.com.

EPA-Required Reporting Unaffected by Anti-Terrorism Standards

In February, EPA and the Department of Homeland Security (DHS) clarified that nothing in the new Chemical Facility Anti-Terrorism Standard (CFATS) regulations alters the reporting requirements under EPCRA or the risk management plan rules of the Clean Air Act for facilities covered under CFATS. This clarification flows from discussions between EPA and DHS officials related to what constitutes sensitive security information about facilities that could be exploited by terrorists to attack these facilities or target them for theft or diversion of materials of concern. For

more information, contact Kiley Taylor at 410.312.7905 or ktaylor@zephyrenv.com.

Reduced EPA Budget Focuses on Greenhouse Gases and Compliance

In February, EPA released its proposed fiscal year 2009 budget of \$7.14 billion, down 4.4 percent from 2008. The proposed budget includes \$563 million for enforcement, the largest enforcement budget ever. The budget also includes \$98 million to support the President's plan to reduce greenhouse gas intensity by 18 percent by 2012, \$44 million for Energy Star programs designed to help consumers and businesses invest in efficient equipment, \$5 million for the Asia Pacific Partnership to support international efforts to reduce greenhouse gas emissions, \$4.4 million for Methane to Markets to promote methane recovery and use, and \$16 million for global climate change research. For more information, contact Brett Davis at 512.879.6628 or bdavis@zephyrenv.com.

Coast Guard Issues All Appropriate Inquiry Rule for Spill Liability Defense

On January 14, the Coast Guard published standards and practices concerning the "all appropriate inquiries" (AAI) element of liability defense for oil spills. Specifically, it concerns owners or operators of facilities that discharge or pose substantial threat of discharge of oil into the navigable waters, adjoining shorelines, or the exclusive economic zone. To be entitled to the defense, persons must show that, before acquiring the real property on which the facility is located, they had made AAI into its previous ownership and uses to determine the presence or likely presence of oil. This became effective February 13. For more information, contact Becky Luman at 281.668.7343 or rluman@zephyrenv.com.

EPA Makes Numerous Changes to Part 72 and 75 Rules

On January 24, EPA finalized revisions to the continuous emissions monitoring requirements under the Acid Rain Program, the NO_x Budget Trading Program, the Clean Air Interstate Rule, and the Clean Air Mercury Rule. Electric service providers, process sources with large boilers, turbines, combined cycle units, process heaters, and cement kilns among others are affected. The rule changes revise 40 CFR Parts 72 and 75 in an attempt to fix inconsistencies in the provisions, address issues that have been raised during program implementation, and to modernize the submittal of data by affected sources. For more information, contact Paul Little at 281.668.7347 or plittle@zephyrenv.com.

EPA Issues NSR Recordkeeping Rules

Responding to a 2005 U.S. Court of Appeals decision, EPA has issued clarifications to its "reasonable possibility" recordkeeping standard for modifications that do not trigger NSR. EPA explains that a "reasonable possibility" of a significant net emissions increase exists when the projected increase equals or exceeds 50 percent of the applicable NSR significance level. This project-

ed increase also includes emissions due to demand growth—emissions that normally are excluded in NSR applicability. The rule clarifies the pre-change and post-change recordkeeping and reporting requirements if there is a "reasonable possibility" of a significant net emissions increase. For more information, contact Roger Brower at 410.312.7907 or rbrower@zephyrenv.com.

USFWS Proposes to De-list the Brown Pelican

On February 8, Interior Secretary Dirk Kempthorne announced the intention of the U.S. Fish and Wildlife Service to remove the brown pelican from the endangered species list within its current range along the Gulf of Mexico and Pacific Coasts. It had previously been de-listed along its Atlantic Coast range. Recovery of the species since its original listing in 1970 is attributed to the 1972 ban on DDT as well as the restocking of populations and protection of rookeries. If this proposal is finalized, nesting brown pelicans will still be protected under the provisions of the Migratory Bird Treaty Act. For additional information, contact Clay Fischer at 512.879.6629 or cfischer@zephyrenv.com.

EPA Rolls Out Voluntary Nanoscale Materials Stewardship Program

On January 28, EPA announced that it is implementing a voluntary Nanoscale Materials Stewardship Program to support new and existing nanoscale material TSCA programs. The basic intentions of the program are to build EPA's knowledge to support future regulatory development and to encourage safe and responsible industry practices concerning nanoscale materials. Companies potentially affected by this action are those that manufacture, import, process, or use nanoscale materials that contain chemical substances subject to TSCA. For more information, contact Kimberly Brandt at 512.879.6641 or kbrandt@zephyrenv.com.

EPA Plans Changes to NSPS and MACT Rules for Engines

On January 24, EPA issued an advanced notice of proposed rulemaking to solicit comment and collect information to aid in developing further regulations of HAP emissions from older, larger stationary diesel engines. The engines of concern are not currently regulated under the existing Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (NSPS IIII) or National Emission Standards for Hazardous Air Pollution for Reciprocating Internal Combustion Engines (MACT ZZZZ). For additional information, please contact Pete Stevenson at 512.879.6619 or pstevenson@zephyrenv.com.

state news

EPA Tells Texas to Fix Flexible Air Permit Program

In a March 12 letter to the TCEQ, EPA itemized the specific changes that would be needed to make the TCEQ's Flexible

Permit rule acceptable and approvable. One of EPA's major concerns is that the Texas Flexible Permit Program can be applied to both minor and major sources, whereas other states' Flexible Permit Programs are for minor sources only. Other EPA concerns involve the practical enforceability of a cap involving many sources (EPA suggests smaller sub caps); major NSR netting; mechanisms to modify and/or amend a flex permit; and public notice requirements. In a footnote, EPA commented that Chapter 39, the TCEQ's public notice regulation, has not yet been approved by EPA. For further information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

TCEQ Renews Construction Storm Water Permit TXR150000

On February 13 the TCEQ renewed TPDES Permit No. TXR150000, which authorizes discharges from construction sites into surface waters of the state. The permit went into effect for a five-year period on March 5. To ensure continued coverage, existing permitted construction sites that are required to submit a Notice of Intent must do so by June 3, 2008. The revised general permit introduces several significant changes, including new key definitions, fees, and submittal methods. For more information, contact Becky Luman at 281.668.7343 or rluman@zephyrenv.com.

EPA Reclassifies Beaumont-Port Arthur Ozone Non-Attainment Area as Moderate

As of April 17, 2008, Texas' Beaumont/Port Arthur (BPA) Ozone Non-Attainment area will be officially reclassified as moderate under the 8-hour ozone standard. The reclassification was prompted by exceedances of National Ambient Air Quality Standards (NAAQS) after the June 15, 2007 attainment deadline. Texas must submit a revised clean air implementation plan by January 1, 2009 that would bring the BPA area into attainment by the new June 15, 2010 deadline. For more information, contact Bryan Osborne at 512.579.3815 or bosborne@zephyrenv.com.

TCEQ Requests Maximum Time to Revise Houston Region Ozone Plan

On December 31, 2007, EPA granted the request by Texas to reclassify the Houston/Galveston/Brazoria non-attainment area from moderate to severe with respect to the 8-hour ozone standard. The TCEQ responded on January 30 with a request for the maximum time possible for revising the State Implementation Plan to 1) allow the use of data from the recent 2005 and 2006 air quality study; 2) allow use of the 2006 emissions inventory data for control strategy development; and 3) provide for stakeholder process in developing the necessary air emissions reductions. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

potential for reduced operating costs. British Petroleum's (BP's) petroleum refinery located in Perth, Australia demonstrates what can be achieved using these management principles — by measuring its refinery-wide water usage, BP has been able to increase the recycling and reuse of process water, reduce leakage in water supply and steam return systems, and replace municipal water with lower-quality groundwater for cooling water make-up. As a result, the facility has reduced overall water consumption by more than 40 percent or nearly 800,000 gallons per day!

Source reduction of pollution has proven to be an adaptable, cost-effective technique of solid waste management, and its success is equally transferable to sustainable water management. Reduction of the volume and pollution load of wastewater discharges is easiest to accomplish at the source via process or resource re-engineering, conservation and reuse, and better water treatment planning. For example, by reusing approximately 98 percent of the chemicals involved in its pulp and paper-making processes and completely eliminating its chlorine bleaching process, Weyerhaeuser has decreased releases of organic halides by more than 90 percent and essentially eliminated releases of dioxin from the wastewaters discharged from its mill operations.

Finally, users or suppliers of significant amounts of water may find it advantageous to assess environmental impacts before undertaking major projects to prevent the solution of one environmental problem from causing another. Such assessments can also help protect economic interests by ensuring safe and adequate supplies and equitable disposition of available water resources and by identifying the potential for contamination of receiving waters and damage to associated downstream ecosystems. They can also prevent difficulties down the road that could force shutdown of processes due to insufficient water resources or unintended ecological impacts.

By putting in place water management plans, measuring water use efficiency and treatment effectiveness, reducing water pollution at the source, and assessing environmental impacts, significant progress can be made towards resolving critical water supply and pollution issues that limit sustainability. These techniques are best used conjunctively. However, the implementation of just a few over time can contribute to the overall goal of sustainable water management.

We use water drop by drop. The earth replenishes water drop by drop (when it can). Just remember — there are no free refills.

Michele Foss

Project Engineering Associate

“Open Source” Renewable Energy

The term “open source” has come to have a specific meaning in the world of computer software, but it’s a term that may also prove to be useful in other areas of technical endeavor. Wikipedia defines “open source” as “a set of principles and practices on how to write *software*, the most important of which is that the *source code* is openly available.”

It seems the information age has greatly accelerated the pace and breadth of developments in renewable energy, as opposed to the status quo from our last energy crisis twenty years ago, when we waited on the government and large business sectors to provide energy solutions. Today’s easy exchange of ideas and technology has led us to an “open source” environment for renewable energy.

Now, many of the promising new approaches to renewable energy seem to be coming from a new set of players, including students or smaller start-up enterprises. I cited an example in my last column (see “Currents”, January 2008), in which tech giant Google is investing millions in its own renewable energy business.

On college campuses, an earthquake of activism (both technical and political) has been rumbling across the country as students — armed with cell phones, technical and political savvy, and lots of contacts — are taking on the environmental issues of the day. The M.I.T. Energy Club was founded in 2004 by a few grad students discussing energy over beers at a campus bar. Today it has 600-plus members who have put on scores of events focused on building energy expertise among M.I.T. students and faculty.

Columnist Thomas Friedman (www.thomasfriedman.com) reports that “the Vehicle Design Summit — a global, open-source, collaborative effort, managed by M.I.T. students, has 25 college teams around the world, including in India and China, working together to build a plug-in electric hybrid vehicle within three years. Each team contributes a different set of parts or designs. And I thought writing for my college newspaper was cool. These kids are building a hyper-efficient car, which, they hope, ‘will demonstrate a 95-percent reduction in embodied energy, materials and toxicity from cradle to grave’ and provide 200 m.p.g. energy equivalency or better — the Linux of cars!”

In Zephyr’s home town of Austin, the Austin American–Statesman (www.statesman.com) reports that “interest in solar power is fueling a surge of classes” at Austin Community College. ACC’s two-year renewable energy program aims to train workers in an industry that



is moving from powering homes and businesses with traditional sources to renewable ones. Also in Austin, the new promise of economical solar energy solutions has not been lost on semiconductor tool manufacturer Applied Materials (www.appliedmaterials.com). The firm states that “by applying its four decades of thin film-on-silicon experience to the manufacturing of solar modules, the total volume of solar panels manufactured each year can be vastly increased. At the same time, Applied Materials’ products are aimed at reducing the cost per watt of energy produced, making them more competitive with conventional electricity generation.”

Another innovative start-up firm, Solfocus (www.solfocus.com) of Mountain View, California is combining the science of optics with the latest developments in photovoltaics to increase the efficiency of its solar power technology. Solfocus claims that its technology, called “concentrated photovoltaics” or CPV, can yield a 40-percent increase in photovoltaic output. Solfocus is certainly not limited to “boutique” applications — early this year, Spain’s Institute of Concentration Photovoltaics Systems (ISFOC) announced the installation of the first Solfocus CPV array in the ISFOC’s three-megawatt project in Castilla-LaMancha.

It’s exciting to watch all these developments in renewable energy gain momentum — it’s not much of a stretch to predict that this open source approach to renewable energy will lead to the creation and growth of some new, dynamic American businesses and, not incidentally, will help solve some of our most intractable energy dependency and environmental issues.

Joe Zupan
President

Zephyr is a professional services firm providing worldwide consulting, training and data systems to the industrial, commercial and public sectors. The firm’s major areas of practice are air and water quality, waste issues, worker and community safety, and incident management.

Currents is published quarterly by Zephyr Environmental Corporation, is edited by David Cabe and Pete Stevensen, and designed by Allen Griffith of Eye 4 Design. Current and past issues of this newsletter are available at our website. For more information about *Currents*, or to add your name to our subscription list, please email: currents@zephyrenv.com or visit www.zephyrenv.com.

Maryland and Texas Areas Proposed for Attainment of Ozone NAAQS

Just one month before tightening its ozone air quality standard, EPA proposed to designate the Early Action Compact (EAC) areas of Washington County, Maryland and San Antonio, Texas, along with 11 other areas in the eastern U.S., as attainment with respect to the previously existing ozone standard. This proposal is based on the areas meeting EAC program milestones and regional ambient ozone monitoring data for the 2005-2007 period showing attainment in these areas. The EPA plans to revoke the 1-hour ozone NAAQS for these same EAC areas one year after the effective date of the 8-hour ozone NAAQS designation. Implications to these areas of the March 12 revision to the 8-hour ozone have not been evaluated, but it is likely that many counties will be declared non-attainment. For more information, contact Lou Corio at 410.312.7912 or lcorio@zephyrenv.com.

TCEQ Adopts Clean Energy Project Permitting Rule

In response to Texas House Bill 3732, the TCEQ, in January, adopted new rules to expedite the processing of air quality permit applications as an incentive for the development of advanced clean electric power projects in Texas. To be eligible for expedited processing, such projects must: 1) generate electricity from coal, petroleum coke, biomass, solid waste, or fuel cells using hydrogen derived from such fuels, 2) capture, sequester, or abate any carbon dioxide emissions, and 3) achieve at least a 99-percent reduction in sulfur dioxide emissions, at least a 95-percent reduction in mercury emissions, and a nitrogen oxides emission rate of no greater than 0.05 pounds per million British thermal units. For more information, contact Curtis Harder at 512.879.6643 or charder@zephyrenv.com.

Federal Land Managers Criticize TCEQ Regional Haze Plan

On December 5, 2007, the TCEQ proposed revisions to the Texas State Implementation Plan for visibility protection at Federal Class I areas. During the public comment period the U.S. Forest Service, the National Park Service, and the Fish and Wildlife Service (Federal Land Managers) commented on the regional haze plan, maintaining that it sets the threshold too high for considering sources that impact visibility at Class I areas and asserting that Class I areas near Texas will have a more difficult time meeting their visibility goals. The FLMs also recommended that an Area of Influence study be conducted for those Class I areas outside of Texas. For more information, contact Bill Jones at 410.312.7910 or bjones@zephyrenv.com.

TCEQ Approves ASARCO Air Permit

Culminating a five-year process including a contested case hearing, the issuance of a Commission Order, independent studies by third-party experts, and completion of comprehensive air dispersion modeling and engineering studies by ASARCO, the TCEQ Commissioners, on February 13, unanimously approved ASARCO's application to renew the air quality permit for its El Paso copper smelter. On March 19, the City of El Paso and the New Mexico Department of Environmental Quality petitioned the TCEQ to reverse its February decision and revoke the permit. For more information, contact David Cabe at 512.879.6644 or dcabe@zephyrenv.com.

Austin, Texas 78746

Suite 450

2600 Via Fortuna

Corporate Headquarters

consulting • training • data systems
www.zephyrenv.com

environmental corporation
zephyr



PRST STD
U.S.
POSTAGE PAID
AUSTIN, TEXAS
PERMIT NO.
2520