

zephyr®

Currents

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Oil and Gas Industry Faces Regulatory Climate Change

After enjoying the benefits of a relatively stable air regulatory climate, the oil and gas exploration, production, processing and transmission industrial sector (“the O&G industry”) is entering a period of rapid regulatory warming; the trend is irreversible, and the industry will have to adapt to the rising tide of state and federal regulatory changes in order to meet new compliance demands. The changes the industry faces through 2011 are myriad: state permitting rules are being added and revised, maintenance startup and shutdown permitting requirements are being imposed, new ambient air quality standards are coming into effect, production-specific greenhouse gas recordkeeping and reporting is mandatory, and revisions to New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPS) are being expanded. To put this in perspective, the refining and petrochemical industries had 15 years to adapt to levels of changes in the air quality rules that the O&G industry must deal with in the next two years.

New State Requirements

Perhaps nowhere does the shifting regulatory landscape have more impact on the O&G industry than in Texas — a state unique in the level of scrutiny and pressure its air regulatory programs have received from EPA. For instance, the TCEQ has proposed major revisions to its O&G Standard Permit (SP) and Permit by Rule (PBR) — authorization mechanisms that have been used to build and modify tens of thousands of facilities. Due to new and more restrictive qualification requirements under the proposed O&G PBR, companies will experience a significant increase in the effort required to demonstrate their eligibility. Specifically, if they want to use the O&G PBR, companies will need to submit PBR registrations to the TCEQ regardless of the type of activity being authorized. In addition, they will have to perform rigorous effects evaluations for multiple pollutants and will be required to demonstrate that best management practices will be used in operating, maintaining, and monitoring



processes and equipment and in the way records are kept. Also, the rule imposes requirements for the detection and repair of fugitive leaks. And, hourly emissions limits for NO_x, SO₂, H₂S, CO, PM₁₀/PM_{2.5}, VOC, formaldehyde, benzene, toluene, and xylene will be specified in the PBR.

For the first time, planned maintenance, startup and shutdown (MSS) are addressed in the O&G PBR. Under the proposed rule, companies that register to use the PBR after January 5, 2012 will be required to quantify their planned MSS emissions and to demonstrate they will not cause the PBR emissions limitations to be exceeded. In addition, records sufficient to demonstrate compliance with the PBR's MSS requirements will have to be kept.

Federal Rules: Stricter Limits and Changing Focus

The national ambient air quality standards have been significantly tightened in the last year — in particular, the new 1-hour standards for NO₂ and SO₂ may pose significant challenges in the permitting of some O&G projects. In many cases, proposed new equipment, by itself, may not contribute significantly to modeled impacts. However, it may be difficult, without significant design and operational changes, to “model in” to compliance if new sources are planned at sites that already have large

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FROM THE TRENCHES

Adventures in Lizard Land

I hurried outside the designated PPE zone to pull off my full-face respirator and wipe away the waves of sweat blinding my view — it was the third time in thirty minutes. Why I had borrowed a FULL-face mask for an assignment in this tropical heat, I'll never know; even in March, this place bests the Houston summer in percent humidity. As I caught a few breaths of unfiltered air, I heard frenzied yelling in Spanish as the heavily armed guards prepared to process the next shift of workers. At this particular state-owned Colombian oil refinery, security was paramount.

Just four days earlier I was sitting at my desk in Austin, where visions of palm trees and the Caribbean Sea were far from my thoughts. I received an urgent call from a colleague asking if I could drop everything, book a flight to Cartagena, Columbia, and spend two weeks assessing a refinery's wastewater and storm water systems in preparation for an upcoming refinery expansion. My principal destination for the previous work-year had been to the Texas panhandle during the blustery winter; how could I pass up the chance to work in South America?

Days later, I arrived in the welcoming city of Cartagena ready to join the project team that had arrived the previous day. I was ready to ask them: what are the people like? how is the food? the beaches? As I got in the van I was engulfed in a flurry of activity and conversation about my project team's first day without me. It seemed I had a lot to learn about how to get work done here. Through the frantic back-and-forth I gathered that the Colombian work processes were quite different from what we were accustomed to in the States, and by different I mean sloooowwww. Extensive security clearance and job preparation documents would be needed for even the simplest of project tasks, even for copying drawings and documents.

At the end of the first workday, I looked into the field beyond the refinery parking lot and noticed a lizard, about 4 feet long, watching our every move. An iguana! Our team went over to get a better look (and pictures), but the big lizard scurried off as we approached. This sighting seemed to explain why refinery staff shirts were embroidered with a highlighter-green iguana head logo.

After spending two days getting a security badge issued, camera and laptop inspected, receiving initial clearance to take photographs (daily security clearance was also required), and not setting a foot inside the plant, I knew I would have to craft a new strategy to complete my project work on schedule. The learning curve was steep, and the rest of the project team had separate tasks to attend to, but using my high school Spanish I enlisted the help of a few gracious refinery folks to help me conduct my detailed survey of the wastewater and storm water systems. My task was to



obtain a general understanding of the wastewater and storm water collection and treatment, and identify opportunities to route or segregate clean storm water from the wastewater treatment system that was undergoing upgrade. Rain events are frequent on the Caribbean coast, and the resulting storm surges require the treatment plant design to accommodate peak wet weather flow. Removing clean storm water from the wastewater sewer would reduce the size of storm surge facilities at the treatment plant.

By week's end my escorts and I had reached the refinery wastewater treatment plant (la planta de tratamiento). Walking through the treatment process, we made our way downstream toward the final outfall. There, inside the effluent channel, enveloped by a thick mangrove forest, I noticed a flash of movement. My eyes focused, and I noticed what had been there all along, another iguana. This particular lizard was no less than six feet long and was not shy about claiming territory on the opposite bank. I wondered who would win when the lizards wrangle with the water sampling crews for rights to the sunny section near the outfall.

Working with the engineers and operators in Columbia was a valuable learning experience. I quickly found that they were not only very knowledgeable about the intricate workings of their plant, but friendly and eager to teach us Americans a bit about their proud culture. After our days in the plant, our escorts took us through the old walled city of Cartagena, home of the famous writer Gabriel García Márquez. Our escorts told us the rich history of the city as we walked past the antique cannon embattlements that faced the crashing waves of the bay. I only hoped that I'd be lucky enough to return to Cartagena for a follow-up project — and a reunion with the iguanas. ✨

Eric Quiat
Project Engineer

Ready or not, EPA's Renovation, Repair, and Painting Program Rule ("RRP") is here. RRP's goal is to eliminate or reduce lead toxicity, particularly in children. *It is likely to affect you if you own, live in, or perform certain services in, housing built before 1978.* Under RRP, anyone paid to perform renovations, repairs, or other work that disturbs more than 6 square feet of painted surfaces in target housing or child-occupied facilities must (with limited exceptions) be EPA-certified and follow certain work practices. "Target housing" is any housing constructed before 1978, except for housing for the elderly or a zero-bedroom dwelling. A "child-occupied facility" is a building, or any portion thereof, constructed before 1978 and visited regularly by the same child, with certain minimum requirements.

Selected Regulatory Events

Beginning December 22, 2008, persons renovating for compensation target housing or child-occupied facilities (including painting that disturbs the surface) must provide a copy of EPA's Renovate Right to the owners and occupants before beginning.

On April 22, 2010, RRP's training and work practices requirements became effective. A renovator becomes EPA-certified by taking an 8-hour course from an accredited instructor. The required work practices are designed to ensure that the renovator warns affected persons of the dangers of lead dust before and during renovation, protects his or her own health, and contains, minimizes and removes dust generated by the renovation. Additionally, some work practices are absolutely forbidden on lead-based paint.

The work practices do not apply if a lead inspector or risk assessor certifies that the building is free of lead above a specified regulatory level. Alternatively, a certified renovator may use an EPA-approved test kit to test each component affected by the renovation to determine whether it is free of lead above the regulatory level.

Also, each renovation firm — including sole proprietorships — must be certified, because only certified firms can perform renovations subject to RRP. The renovation firm must keep all records necessary to prove compliance for at least 3 years. Sample record-keeping forms can be found at <http://www.epa.gov/lead/pubs/sbcomplianceguide.pdf>.

On May 6, 2010, EPA eliminated the provision that had allowed owner-occupants to opt out of the RRP if no pregnant women or children under the age of 6 occupied the home.

On June 18, 2010, EPA, concerned that there were not enough training and certification programs, announced it would suspend enforcement for the failure to have proper training and certifica-



tion. *EPA will not enforce against workers so long as they sign up for a lead-safe training class by September 30, 2010, and complete it by December 31, 2010. EPA will not enforce against firms that have not been certified until October 1, 2010. Importantly, however, the work practice regulations are currently enforceable - EPA can assess penalties of up to \$37,500 per day per violation.*

The Texas Two-Step

EPA administers RRP in Texas, but the Texas Department of State Health Services administers the lead inspection, risk assessment, and abatement program. EPA's RRP and Texas' lead abatement program will overlap when the RRP rules require a certification from a Texas-certified lead inspector or risk assessor.

Pending Regulations

On May 6, 2010, EPA proposed dust wipe testing after most renovations covered by the RRP rule. However, for some activities, the proposed rule would further require that the renovator demonstrate clearance: i.e., that the lead dust levels remaining in the work areas are below regulatory levels. Wipe testing would be required after using a heat gun, removing or replacing window or door frames, scraping 60 feet or more of painted surfaces, and removing more than 40 feet of trim, molding, cabinets, or other fixtures.

Regardless of the test results, no further cleanup activities are required. The renovator would only be required to provide those results to the owners and occupants of the residence. However, for two renovation activities, the renovator would have to take additional work steps to ensure that the amount of dust remaining falls below regulatory levels when (i) using high-speed machines to remove paint, and (ii) demolishing or removing, by destructive means, more than 6 feet of plaster and lath building component.

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News Briefs

national news

EPA Denies Petitions to Reconsider GHG Endangerment Finding

On July 29, EPA denied ten petitions that challenged its 2009 determination that climate change due to emissions of greenhouse gases (GHG) threatens the public's health and the environment. The petitions asked EPA to reconsider its "Endangerment Finding", claiming that the climate science of the Intergovernmental Panel on Climate Change (IPCC), the U.S. National Academy of Sciences, and the U.S. Global Change Research Program could not be trusted, in part, due to allegations of a conspiracy to suppress conflicting evidence. In its review, EPA found that climate science is credible, compelling, and growing stronger and that, as a result, it is obligated to regulate GHG emissions under the authority it believes is granted under the Clean Air Act. For more information, contact Brett Davis at 512.879.6628 or bdavis@zephyrenv.com.

EPA Proposes to Require States to Adopt GHG Permitting Rules

On August 12, EPA proposed rules to ensure implementation of its GHG air permitting requirements. EPA's GHG Tailoring Rule specifies that beginning in January 2011, Prevention of Significant Deterioration (PSD) permits will be required for projects which result in significant increases in GHG emissions. However, EPA has tentatively identified thirteen states, including Texas, in which State Implementation Plans (SIP) do not provide the state authority to authorize GHG emissions in PSD permits. Consequently, EPA has proposed to require states to revise such SIPs and has proposed to authorize establishment of Federal Implementation Plans (FIP) to be used in those states that fail to make the necessary SIP revisions, opening the door to EPA take-over of the GHG PSD permitting process in those states. For more information, contact David Mahler at 410.312.7909 or dmahler@zephyrenv.com.

Congress Urges EPA to Reconsider Boiler MACT Proposal

On August 2, one hundred members of Congress sent a letter to EPA Administrator Lisa Jackson expressing concern with the proposed hazardous air pollutant standards for non-utility boilers (the

Boiler MACT) issued in June and urging EPA to "use a method to set emission standards that is based on what real world performing units actually can achieve." The main concern expressed in the letter, and a concern widely shared by industry, is that EPA used a compilation of the best performing (lowest emitting) sources on a pollutant-by-pollutant basis, regardless of the source/fuel type, to establish the MACT standards. As a result, the letter claims, the proposed rule's emission standards can be too stringent for a particular source type (e.g., biomass boilers). In its letter, the Congressional members urged EPA to consider approaches that foster economic recovery and jobs. For more information, contact Lou Corio at 410.312.7912 or lcorio@zephyrenv.com.

EPA Proposes Changes to Six MACT Rules

EPA has proposed changes to hazardous air pollutant emissions standards affecting 16 industrial source categories including chromium electroplating, synthetic rubber production, marine tank vessel loading, pharmaceuticals production, printing and publishing, and steel pickling. The proposed changes, released on September 14, would eliminate startup, shutdown and malfunction provisions from the rules and would revise emission standards. Final rules are expected on June 30, 2011. For more information, contact Eric Quiat at 512.579.3823 or equiat@zephyrenv.com.

EPA Proposes Changes to Drinking Water Coliform Rule

On July 14, EPA proposed changes to the Total Coliform Rule, establishing, for the first time, a maximum contaminant level goal (MCLG) and maximum contaminant level (MCL) for E. coli in drinking water. The rule revisions would also require water system operators that discover coliform contamination in the distribution system to thoroughly assess the problem and take immediate corrective action to more expeditiously protect public health. These changes would impact all public water systems, as well as privately owned community water systems, non-transient non-community water systems (including industrial facilities that treat their own groundwater for use in break rooms and restrooms), and transient non-community water systems. For more information, contact Michele Foss at 281.668.7342 or mfoss@zephyrenv.com.

EPA Proposes CAIR Replacement Rule

On August 2, EPA proposed a replacement to the Clean Air Interstate Rule (CAIR), which was remanded to EPA by

Court action in 2008. The proposed replacement, known as the Transport Rule, would limit power plant emissions of SO₂ and NO_x from 31 Eastern U.S. states and the District of Columbia — regions whose emissions EPA has determined affect the ability of downwind states to meet air quality standards for fine particles and ozone. The proposed rule would minimize the use of regional or interstate trading of emissions, and, as such, EPA believes it will result in greater emissions reductions. EPA is requesting public comment on three rule alternatives: 1) the use of intrastate trading, with limited interstate trading; 2) the use of only intrastate trading; and 3) the specification of individual emissions limits for each power plant. For more information, contact Roger Brower at 410.312.7907 or rbrower@zephyrenv.com.

EPA Requires Dispersion Modeling for SO₂ Compliance Purposes

On June 22, EPA established a new 1-hour air quality standard for SO₂, as well as the methods to be used in demonstrating attainment with this standard. The final rule includes the unprecedented prescription of the use of atmospheric dispersion modeling (in addition to ambient monitoring) as a tool for assessing compliance of an area with the standard. On August 23, the TCEQ petitioned EPA to stay the implementation of the new rule pending reconsideration of issues related to the use of modeling in compliance demonstrations. In particular, the TCEQ argued that the use of models in this way is inconsistent with the probabilistic nature of the standard, that the modeling requirement was not included in the proposed rule, and that the public was not given a chance to comment on or object to the addition. For more information, contact David Castro at 512.579.3820 or dcastro@zephyrenv.com.

EPA Amends Portland Cement HAP Emissions Standards

On September 9, EPA published changes to both the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry and to the New Source Performance Standards (NSPS) for Portland Cement Plants. The NESHAP amendments address emission limits for mercury, total hydrocarbons, particulate matter, and hydrochloric acid and include new standards for startup and shutdown conditions. The amendments to the NSPS affect emissions of particulate matter, opacity, nitrogen oxides, and sulfur dioxides for facilities that commence construction, modification, or reconstruction after June 16, 2008. Changes to these standards go into effect November 8. For more information, contact Lynne Spector at 410.312.7906 or lspector@zephyrenv.com.

OSHA and DOT Discourage Texting While Driving

Employers will soon be required to eliminate financial and other incentives for texting while driving. On September 21, the Occupational Health and Safety Administration and the Department of Transportation announced an initiative to discourage texting while driving on the job. And on September 27, the Pipeline and

Hazardous Materials Safety Administration proposed to ban texting by drivers of hazardous materials cargo, and the Federal Motor Carrier Safety Administration proposed to prohibit motor carriers from requiring or allowing drivers of covered motor vehicles to engage in texting. Based on studies by the Insurance Institute for Highway Safety, drivers who use hand-held devices are four times as likely to get into crashes serious enough to injure themselves. For more information, contact Bonnie Blam at 512.579.3817 or bblam@zephyrenv.com.

EPA Delays Final Issuance of New Ozone Standard

In an August 20 status report filed with the U.S. Court of Appeals, EPA announced that it would be delaying until the end of October the issuance of a new air quality standard for ozone, missing the original August 31 deadline established with the Court. As reasons for this delay, EPA stated that it was still evaluating comments on its January 19, 2010 proposed standard, which would lower the current acceptable 8-hour ozone level from 0.075 ppm to somewhere between 0.060 and 0.070 ppm. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

EPA Issues Hazardous Air Pollutant Standards for Spark Ignition Engines

In one of a series of rulemakings for reciprocating internal combustion engines (RICE), on August 10, EPA issued new hazardous air pollutant standards for existing stationary spark ignition RICE with ratings of 500 brake HP or less located at major sources of hazardous air pollutants (HAPs), and for existing stationary spark ignition RICE at area sources of HAPs. Affected engines will need to reduce emissions of carbon monoxide and/or formaldehyde using catalytic controls by no later than October 19, 2013. In addition, the rulemaking includes requirements for catalyst monitoring, performance testing, and engine maintenance. For more information, contact David Mahler at 410.312.7909 or dmahler@zephyrenv.com.

EPA Finalizes PSD Levels for Fine Particles

A year later than expected, EPA announced on September 29 final changes to its Prevention of Significant Deterioration (PSD) rules for fine particles (PM_{2.5}). Of particular significance, with these changes, EPA is establishing 24-hour and annual significant impact levels (SILs) for Class II Areas of 1.2 micrograms per cubic meter (µg/m³) and 0.3 µg/m³, respectively, and establishing 24-hour and annual PSD Class II increments of 9 µg/m³ and 4 µg/m³, respectively. The new SILs and a new significant monitoring concentration will be effective 60 days after publication of the rule changes in the *Federal Register* (FR); however, the PSD increments will not go into effect until one year after the FR notice. For more information, contact Lou Corio at 410.312.7912 or lcorio@zephyrenv.com.

state news

EPA Finalizes Disapproval of NSR Related to the Texas Clean Air Plan

On August 31, EPA disapproved sections of the NSR rules the TCEQ submitted for approval in 2005 and 2006 on the grounds that the TCEQ failed to clearly distinguish “major” and “minor” BACT for NSR permitting and failed to clearly state that the use of Plantwide Applicability Limitations (PALs) apply to existing sources only and must include all emissions of a pollutant at a site. Additionally, while EPA had previously approved TCEQ’s Standard Permit Program, it is now disapproving the revised Pollution Control Project (PCP) Standard Permit that TCEQ submitted for approval in 2006 claiming that it covers too broad a source spectrum and does not lend itself to standardized, enforceable, reliable permit conditions. This disapproval is the latest action arising from a July 2009 agreement between EPA, the Business Coalition for Clean Air Appeal Group, the Texas Association of Business, and the Texas Oil and Gas Association regarding the timing of federal review of Texas air permitting rule changes. For more information, contact Larry Moon at 512.879.6619 or lmoon@zephyrenv.com.

EPA Backs off Flint Hills Permit Takeover

In a May 25 letter, EPA Region 6 notified Flint Hills Resources that it was taking over from the TCEQ the review of the company’s application to renew the Title V permit for its Corpus Christi East Refinery. As a consequence of this action, the EPA required that the company submit a Part 71 Title V Operating Permit application to EPA by September 15. However, on July 19, EPA Region 6 rescinded the letter in recognition of Flint Hills’ concerns about meeting the September deadline and based on Flint Hills’ willingness to work with EPA and the TCEQ to ensure that their state-issued flexible permit is “deflexed” within 12 months. Under a new agreement, EPA and Flint Hills agreed to enter into discussions to identify a joint path forward for addressing the air permits at the refinery. For more information, contact Larry Moon at 512.879.6619 or lmoon@zephyrenv.com.

TCEQ and EPA Make Progress on Flexible Permit Issues

In a process some characterize as “one step forward/two steps back”, the TCEQ and EPA are inching toward a solution to EPA’s objections to the TCEQ’s flexible air quality permitting program. In a public meeting on September 16 between TCEQ and EPA, the agencies jointly agreed, in concept, to a path forward involving the development of a “4-step” process for “deflexing” flexible permits issued under the TCEQ Chapter 116, Subchapter G rules. Although details haven’t been worked out, the process would involve: 1) revision to the Title V permit committing to deflexing, 2) a “look-back” at past authorizations for changes to ensure that federally applicable requirements were met, 3) an application to amend the Subchapter G permit to a Subchapter B permit, and 4) incorporation of the amended permit conditions into the Title V permit. In a related action, EPA sent letters on September 20 to

Texas companies offering them an “opportunity to confer” about resolving issues associated with their flexible permits, including the possible use of the TCEQ-run 4-step deflexing process. According to the letter, failure of a company to avail itself of this opportunity could result in enforcement action. For more information, contact David Cabe at 512.879.6644 or dcabe@zephyrenv.com.

TCEQ Posts New “Air Pollution Control” Guidance Document

On August 10, the TCEQ posted a new “Air Pollution Control” guidance document for review and comment. This document, intended as an internal guidance tool for Agency air permit reviewers, covers Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER), Reasonably Available Control Technology (RACT), Maximum Achievable Control Technology (MACT), and Generally Available Control Technology (GACT) definitions and implementation and is, arguably, the most comprehensive discussion of these topics that the TCEQ has published. Of note, the guidance document replaces previous BACT guidance, including the Tier III BACT guidance document, discusses the differences between federal and state BACT definitions and how to reconcile them, and addresses implementing MACT when a MACT standard is not in place. For more information, contact Anna de la Garza at 512.579.3821 or adelagarza@zephyrenv.com.

TCEQ Proposes Changes to Oil and Gas Permitting Rules

On August 13, the TCEQ published proposed revisions to the permit by rule (PBR) and the standard permit (SP) for oil and gas (O&G) sites. The proposed PBR requirements would expand the current 1-page PBR to approximately 30 pages and would lead to significant changes for a number of facilities. Both the PBR and SP establish new requirements with regard to federal standards, applicability, registration, emission limits, modeling, maintenance/startup/shutdown (MSS), and monitoring and recordkeeping requirements. If adopted according to schedule, companies will be required to include planned MSS emissions in O&G PBR registrations after January 5, 2012. For more information, contact Quinn Alexander at 281.668.7347 or qalexander@zephyrenv.com. ✨

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Also on May 6, 2010, EPA gave an advanced notice of proposed rulemaking to regulate the renovation, repair, and painting of public and commercial buildings.

The comment periods are closed, so the proposed rules could be finalized soon. Get certified and stay tuned. ✨

Brenda Clayton
Partner, Kelly Hart & Hallman LLP

Boy Scout's Guide to Air Quality Permitting

In this month's feature article, Thomas Sullivan discusses at length some of the new air quality permitting challenges facing the oil and gas industry. And these challenges are substantial — meeting them will significantly tax all available resources, not only those of the regulated community, but also of the state agencies administering the provisions of new and existing air quality regulations. These days, with the advent of new technologies that are being used to develop oil and gas in some areas that haven't seen such development in a long time, state agencies outside of Texas, Louisiana, Oklahoma, etc. are also scrambling to keep up.

But, what if my industry is not oil and gas? All of that stuff just now hitting the oil patch is no skin off of my nose, right? Actually, you might want to check your nose in the mirror one more time. Some of the new regulatory developments will have the effect of consuming the “bandwidth” of the agencies as well as that of your air quality consultants, to the degree that you could see a slowdown in addressing your non-oil-and-gas industry permitting needs.

Let's briefly review some of the concurrent and extensive air quality permitting issues that we're all suddenly dealing with. As Thomas mentions in the feature article, at the federal level there are remarkable new permitting challenges, including:

- ◆ Significant tightening of air quality standards;
- ◆ Greenhouse gas reporting and permitting.

The feature article also points out that Texas facilities are “doubly blessed” — in addition to new Federal requirements, facilities are also responding to specific challenges, including:

- ◆ Permitting of emissions from maintenance, startup and shut-down (MSS) activities;
- ◆ Major revisions to the Oil & Gas Standard Permit and Permit by Rule;
- ◆ An EPA-imposed requirement to “re-permit” over 120 facilities holding “Flexible Permits” (see “When Bureaucracies Collide” in the July 2010 issue of *Currents*).

Texas MSS permitting is in full swing — the deadline for submitting MSS permit applications to maintain affirmative defense from enforcement actions due to excess emissions is January 1, 2011 for electrical utilities, January 1, 2012 for oil and gas facilities, and January 1, 2013 for everybody remaining. EPA is even



more anxious for flexible permit holders to resolve their flexible permit issues now — they have been ordered to accept EPA's offer of an “opportunity to confer” or spell out plans for how they will fix their permits by late Decemberor be prepared to suffer the consequences.

A particular challenge for the oil and gas facilities, their regulators, and their consultants is the sheer number of facilities and emission sources that haven't been previously considered from an air quality perspective — tens of thousands of sources in Texas alone!

Here's the “take home” message to consider if you are permitting any type of facility — be very mindful of developing a realistic schedule for preparing and submitting your application, given that everybody will be very busy. Also be aware that the regulatory agencies may need significantly more time than usual to review your application, given the volume of submissions they may be getting. I was a Boy Scout about 100 years ago, and that was when I learned the value of “being prepared.” I would highly recommend that regardless of your industry, your type of facility, or your permitting needs, you prepare carefully and secure any assistance you will need well in advance of your target dates. That way, rather than looking like someone who is trying to hire a CPA on April 14th to prepare his or her tax return, you'll look more like a Boy Scout (or Girl Scout) because you will BE PREPARED — always better than being unpleasantly surprised. ✨

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.

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combustion sources, burn sour gas, and/or have short distances between the sources and the fence line.

The federal air rule changes that, arguably, introduce the greatest level of uncertainty to the O&G industry are those related to the mandatory reporting and permitting of greenhouse gases (GHGs). According to the EPA, the O&G sector accounts for 23 percent of domestic emissions of the GHG methane. And this doesn't count the substantial CO₂ emissions from many O&G operations. The O&G industry was brought into the GHG regulatory world through EPA's GHG mandatory reporting rule (or MRR) for general combustion sources, which went into effect January 1, 2010. And, on January 1, 2011, the MRR specific to petroleum and natural gas systems is expected to kick in. Compliance with this rule, still in its draft stage, will be new territory for most O&G environmental staff, mandating detailed reporting requirements for GHG source types unique to the O&G industry, including natural gas powered pneumatic pumps and control actuators, well venting operations, well completion and workover emissions, well testing emissions, enhanced oil recovery injection pump blowdowns, and products and produced water containing CO₂.

The GHG MRR also provides a view of EPA's broader goals for regulation of O&G sites beyond the historical focus on larger fixed facilities, moving upstream to include temporary and portable facilities such as wellhead operations. EPA's casting of a wider regulatory net around the industry is reflected in its review of existing NSPS and NESHAP standards. Specifically, EPA has announced a deadline of January 31, 2011

for proposing changes to its NSPS Subpart KKK "Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants", its NSPS Subpart LLL "Standards of Performance for Onshore Natural Gas Processing: SO₂ Emissions", its NESHAP Subpart HH "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities", and its NESHAP Subpart HHH "National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities". Each of these proposed changes draw in sources not currently addressed under the current rules.

Continuing Areas of Concern

O&G operations are widely distributed geographically, with thousands of unmanned sites where daily operations are performed by contractors. This highly distributed infrastructure adds challenges to environmental compliance in the best of times. But with the dynamic regulatory changes in play now and over the next year, the O&G industry must begin looking at new ways to manage its increasing compliance burden, taking a fresh look at all operations from the wellhead to the pipeline with these new permitting and compliance requirements in mind. ✨

Thomas Sullivan, P.E.
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