Legal Staff Assists Air Quality Division

Administrative Services is the managerial and operational arm of the Department of Environmental Quality and includes the Office of General Counsel. Staff attorneys assigned to the Air Quality Division have multi-faceted responsibilities.

The Air Quality attorneys serve a valuable role in accomplishing the goals of the Air Quality Division. They are (from left to right) Kendal Cody, Karen Jayne, & Pam Dizikes (not shown: Garry Keele).

Legal Staff Reinforces Compliance - Enforcement Decisions

AQUD attorneys review and assist with all compliance and enforcement actions. Federal and State regulations are the guidelines. These issues are complex and usually involve significant problems for the alleged violator. Actions may include Notices of Violation, Requests for Information, Consent Orders and Administrative Compliance Orders.

Settlements may involve SEPs (Supplemental Environmental Projects) and cash penalties. The attorneys carefully review and negotiate each settlement without compromising the regulations that drive the enforcement action or the working relationship between DEQ and Oklahoma industries.

Each formal enforcement case is reviewed and handled with the Legal Staff’s guidance. The same degree of concern and consideration is given to each case, whether large or small. When an enforcement action is initiated, the staff works with each individual or corporation involved to reach a satisfactory settlement.

The Air Quality Division also has a Regional Office in Tulsa, Oklahoma. The Tulsa staff handles all of the enforcement cases in eastern Oklahoma.
Rule development is another responsibility of the Air Quality staff. Rule development is critical to maintaining the air quality in Oklahoma and complying with federal standards set forth by EPA. In addition, the AQD continues to systematically review and revise its rules as part of the Agency-wide “Re-right/De-wrong” program, with the intent to simplify them and remove or replace outdated language. Part of the attorneys’ responsibility in the rulemaking process involves interpreting these regulations and assuring the resulting rules are in compliance with state, regional and federal standards.

These rules must be written to protect the environment and air quality while encouraging industry-friendly policies that attract and keep business in Oklahoma.

Air Quality Attorneys Recommend Changes for Rule Development

AQD attorneys are actively involved in litigation issues relating to Air Quality. Recently, the increased number of power plant applications submitted to the Air Quality Division has required additional time and effort by each staff member.

For example, a recent case involved a proposed 1100-megawatt power plant.

This Administrative Hearing demonstrated the scope and complexity of permitting issues. The legal staff was proud to represent the Agency’s permitting and engineering staff during this case. Agency permitting policies were presented in a professional and courteous manner.

The attorneys assigned to the Air Quality Division are proud to be considered a formidable negotiation and litigation team. They will continue to provide assistance to the Division with compliance and enforcement issues, rulemaking and litigation.

Educating the Public: Another Duty of Air Quality Attorneys

The Redbud Arcadia Power Plant Administrative Hearing demonstrated the need for the attorneys to play a significant role in educating the public about the permitting process. This role may increase as more power plant applications are received.

Air Quality Division attorneys readily accepted the challenges involved with educating the public about the permitting process. This brand of leadership demonstrated to the public the outstanding job the Air Quality Division is doing to protect the environment.
Recent trends in Air Quality management indicate a shift to a more regional approach for developing strategies to address air pollution issues. The Air Quality Division has supported regional activities through participation in the Central States Air Resource Agencies (CenSARA) since 1995. Membership in CenSARA has provided more opportunities for training and increased interaction with other states. Participating states include Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, Oklahoma, and Texas.

Recently, CenSARA received an EPA grant to form one of the five Regional Planning Organizations (RPOs) to reduce regional haze and the fine particulate matter contributing to visibility impairment. This newly formed RPO, known as the Central Regional Air Planning Association (CENRAP), is comprised of the CenSARA member states, tribes, federal agencies and stakeholders. CenSARA provides staff support for CENRAP. Oklahoma has played a significant role in the organization process and establishment of CENRAP.

The Regional Haze rule encourages states to work together to improve visibility in 156 National Parks and Wilderness Areas designated as Class I Areas. The rule requires states to develop long-term strategies and implement programs to reduce emissions that contribute to haze and affect visibility. State Implementation Plans (SIPs) will be submitted specifying actions to be taken.
A view of Oklahoma’s Class I area, the Wichita Mountain Wildlife Refuge near Lawton, Oklahoma, on an overcast day. This Wilderness Area is managed by the U.S. Fish and Wildlife Service.

A view of Oklahoma’s only Class I area, as seen from Mt. Scott.
Improved visibility in Class I areas will also result in better visibility region wide. The clarity, color and form of vistas are obscured by regional haze and the pollutants causing haze can have a significant effect on human health. With participation in this program, Oklahoma can expect better visibility in the Wichita Mountains Wildlife Refuge, our Class I area, and a healthier environment for our citizens.

AQD staff members remain active in CenSARA, representing Oklahoma’s best interests, and also participate in national activities through STAPPA/ALAPCO (State and Territorial Air Pollution Program Administrators, and Association of Local Air Pollution Control Officials). Involvement in this organization and its committees and workgroups provides a mechanism for Oklahoma to receive advance information on current air issues, interact with other states’ air agencies and express the Oklahoma viewpoint as new policy is developed. Continued support of organizations such as STAPPA, CenSARA, and CENRAP allows Oklahoma to make known the priorities and concerns of the state on a regional and national level and to benefit from work being done in other parts of the country.

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by each state, with the first Planning SIP due in 2004. Participation in a RPO allows a state to benefit from the research, modeling, and data analysis done by the organization and use the resulting data to design a plan that is best for that state. Each state commits resources to the RPO and staff to serve on workgroups that will evaluate the problem and make control strategy recommendations for use in state-specific SIPs.

It seems that every month web services provided by the Air Quality Division’s internet web site expand. What started out as a couple of charts and buttons has grown to a lengthy list of provisions. The benefit of this is two-fold. It certainly improves customer service initiatives by providing more timely and accessible information. It also improves employee efficiency. Less time and money is spent mailing and faxing information. While the public is the primary user of the web site, it has actually improved in-house information handling as well.

Perhaps the most frequently used web information is the real-time ambient air monitoring data. Interested individuals, government planning bodies, students and others frequently access it. Having real-time monitoring data available allows for faster planning and responses to ozone alerts. The Air Quality Index is available and updated daily on the web for the Lawton, Tulsa, and Oklahoma City metropolitan areas, which enables citizens to take health precautions as necessary.

Some of the other more commonly accessed web pages include the Forms and Frequently Asked Questions pages for facility permitting and lead-based paint certification. Air Quality Advisory Council meeting agendas and proposed rules are also available on the web site. This allows access and involvement in the AQD rulemaking process by anyone interested.

Future plans for the web site are vast. There are plans to provide listserv ability for notifications of such things as ozone alerts, Council meetings, and public notices. The Agency is researching the possibility of providing online form and document submittal. In addition, the web site is undergoing construction for an improved look and function in the near future.
A refreshing style of government service was offered through the New Source Identification and Tracking Project. Deriving expertise from small business assistance experiences, staff members offer on-site services to small businesses to determine their need for environmental permits.

Small sources of air pollution, often known as neighborhood or “mom-and-pop” operations, are sometimes overlooked despite a potential for emitting pollutants. The Emissions Inventory Section, as well as other Division employees, “find” these facilities during their field trips through various areas in the state. Many of these facilities are found during routine inspections of existing facilities, such as natural gas compressor stations, because many times these types of facilities are in close vicinity to one another. While the vast majority of sources found are minor or de minimis facilities, on rare occasion, a major (i.e., Title V) facility that has been in operation for years is found. This effort is designed to ensure equal treatment of all facilities throughout the state of Oklahoma.

Since the inception of the New Source Identification and Tracking Project early in FY 2001, the AQD staff has actively sought these new sources and offered them compliance assistance. In the past, most of these facilities surfaced as a result of citizen complaints. By that time, the facility was sometimes already in violation of one or more applicable rules.

The compliance assistance approach is friendly and helpful, keeping the goal of compliance in sight. On-site assistance is always offered to lessen the time burden on the small businesses. If accepted, the facility will benefit from step-by-step guidance for completing necessary emissions inventory documents.

An electronic database (TEAM) is maintained to track all communications to and from the facility and allows staff members to check the status of compliance.

These new procedures quickly identify new sources and place them in the mainstream of assistance. Operators of these facilities invariably find the staff a very useful resource in the matter of complying with rules and regulations applicable to them.

At least 49 new sources from a wide range of industrial sectors have been identified, tracked and provided with compliance assistance free of charge. AQD staff is available by telephone, on-site, or at the Agency headquarters to provide help in completing air emissions inventory documents and permit applications.

This project won customers’ acceptance and cooperation. It saved numerous small businesses a great deal of money and credited the Agency with 100 percent compliance on the part of sources that had not been previously identified. Staff members have received numerous positive comments complimenting their friendly service.
The Air Quality Division’s (AQD) TEAM database is considered a “model” of success by all who use it or by those who design databases. Oklahoma is one of the few states in the nation to be recognized by EPA as consistently reporting complete, timely, and usable information. TEAM serves as the main database for AQD, and its structure has become the standard “template” for future DEQ databases. Arguably, TEAM’s greatest strength lies in the fact that it was developed and is improved using in-house expertise.

TEAM was originally developed by a single AQD employee as a means to track compliance inspections. Its utility being apparent from the beginning, TEAM was shared and promptly expanded to include enforcement and permit tracking functions. TEAM has since grown to include ‘air emissions inventory’, ‘new sources’, and mandatory data reporting to several national databases. As a result, services and data accessibility to both the regulated community and Oklahomans have increased as AQD functions became integrated and electronically available through TEAM.

Prior to TEAM, there was typically a three-month lag time for reporting activities to national databases. Employees no longer perform duplicate data entry into multiple databases in order to report activities. Now, AQD has virtually “real-time” reporting capability and employees spend on average 75 percent less time reporting to national databases.

One of the major benefits of the TEAM database is the ease by which all AQD employees can extract information. For instance, any AQD employee can readily query the database and provide up-to-date information to questions from concerned citizens, the regulated community, and other state agencies, as well as the federal government. The TEAM database makes information sharing between AQD employees and the public feasible even in the absence of the primary staff member assigned to a particular project.

Updated information from TEAM is posted daily to the DEQ’s web site.
As a benefit, the reporting burden and mailing costs for both DEQ and industry are greatly reduced as web-based sharing of information expands. This process also ensures that the stakeholders and citizens have the most accurate information available.

Both employees and managers can quickly determine project progress with TEAM to ensure that deadlines are met. Because so much current and historical facility information is readily available by pushing just a few buttons, employees can retrieve comprehensive information for analysis and quickly develop ad hoc reports. AQD employees no longer need to review yards and yards of paper files from multiple locations in order to write a facility permit or prepare for a site inspection.

Every TEAM user is free to request modifications and additions to ensure that TEAM remains an everyday valuable tool. All requests are important - from minor changes on an input form to the design and implementation of an entirely new module. A status list of requested changes is available through the TEAM main menu so that users may monitor progress of updates. Because AQD developed internal database expertise, the changes are prioritized and developed on-site without the need for additional resources or outsourcing.

The TEAM database and its developers (John Downs and S. C. Cannella) received a Governor’s Commendation as a result of being nominated for a ‘2001 Quality Oklahoma Team Day’ award. Team Day (no relation to TEAM database) is an annual Oklahoma event where state government projects are judged for their uniqueness, measurable success, and adherence to quality principles. TEAM continues to gain recognition, both regionally and nationally, as a product that works well and is readily expandable as needs change.
The Air Monitoring Section helps the public make informed, day-to-day decisions with the Air Quality Index (AQI). The AQI has been revised to present not only measured, but also forecasted criteria pollutant levels. It is presented in an easily understood color-coded system with different colors representing different levels of pollution. It also contains a precautionary statement, when necessary, so that members of the public can protect themselves when the pollution levels rise. Three AQI reports are issued daily for the three largest metro areas of the state. The residents of Oklahoma City, Tulsa and Lawton are able to access these reports to check on the air quality in their areas. This is important because the air quality can vary greatly across the state. The AQI is updated daily on the DEQ web site.

The ozone alert program covers the same three metro areas of the state. Lawton is the most recent member to join the ozone alert program. AQD hats go off to the three area Councils of government - ACOG, INCOG and ASCOG - for their efforts concerning ozone prevention and alerts. While it may be difficult to measure the success of the program by measuring decreased levels of ozone, the program has been a success in educating the public about ozone and its dangers.
The installation of four new ozone monitoring sites and the dissemination of near real-time air pollution data headline the accomplishments of the Air Monitoring Section this year. Two additional ozone monitoring sites, Keystone and Lynn Lane, were brought on-line in the Tulsa area and two additional ozone monitoring sites, Yukon and Choctaw, were set up in the Oklahoma City area. A new polling computer was installed and is used to collect and disperse the data from all ozone monitoring sites hourly.

The additional monitoring sites and polling computer were made possible through an EMPACT (EPA’s Environmental Monitoring for Public Access and Community Tracking) grant. EMPACT is a new approach to working with communities to collect, manage, and present environmental information to the public. It works with communities to make timely, accurate, and understandable environmental information available to millions of people nationwide. This allows communities and individuals to make informed, day-to-day decisions about their lives regarding exposure to pollution.

The data collected by the new polling computer is available to the public through the DEQ web site (http://www.deq.state.ok.us) as well as through EPA’s AIRNOW web site (http://www.epa.gov/airnow/). The DEQ web site presents the data as a chart with the current and previous day’s hourly concentrations shown. The AIRNOW web site presents the data in map form and shows how the ozone concentrations vary and change with time. The map shown to the left is an example of the AIRNOW ozone maps. The color coding is consistent with the AIR Quality Index color scheme. Green—Good. Yellow—Moderate. Orange—Unhealthy for Sensitive Groups. Red—Unhealthy.
Monitoring on the Move

The Red River ozone monitoring sites were relocated this year in an effort to better understand ozone transport between Texas and Oklahoma. The Terral Site was moved to Lake Waurika. The Burneyville site was moved to Lake Murray. And, the Lake Texoma site was moved to Kingston. These Special Purpose Monitor (SPMs) sites have been instrumental in ozone alert forecasting as well.

The PM-2.5 monitoring network continues to run smoothly. Air Monitoring Section personnel are working many long shifts and are traveling hundreds of miles to the seventeen sites every three days to set up and collect the PM-2.5 filters. In February, PM-2.5 speciation sampling began at Site 1127 in Tulsa.

As part of EPA’s Trends Network, this site is one of fifty nationwide sampling fine particulate matter for further specific component analysis, such as sulfates, nitrates, organic carbon, elemental carbon, metals and total mass. Fine particulates can travel great distances. Analyses of these samples could help determine the sources of the fine particulates as well as help determine long-term concentration trends of these compounds.

As the Work Turns...

Although the Air Quality Division permit staff has had to absorb the potentially devastating results of significant turnover during the past two years, permit issuance was remarkably high this year. From January 1, 1999 through July 1, 2001, the staff of 24 engineers lost 14 experienced permit writers and hired 13 new engineers. The resulting loss of experience would indicate that performance and pace should drop dramatically. However, the replacement of 58 percent of the staff has not resulted in the predicted drops in productivity, because the staff that remained increased efforts to avoid production decline. These dedicated state employees shouldered a heavier workload, trained newly hired engineers, and streamlined activities whenever and wherever possible.

By working harder and smarter, the Permit Section managed to issue a total of 406 permits this year, 88 Title V permits and 10 PSD permits. The challenge for management is to continue to increase the staff numbers and insure the quickest possible development of new staff, so it can relieve the burden being carried by the remaining experienced permit writers.

During this year, the average permit processing time (not including Title V permits) rose from 115 days to 147 days. However, the average permit issuance time from the date of last submittal of information from the applicant dropped from 58 days to 28.5 days. This means that the increase in issuance time for permits is largely due to incomplete applications and the response time of applicants to staff requests for additional information. Once that information is received, the staff issues the permit in half the time that was needed at the beginning of this past year. Likewise, the staff reduced the overall time spent to issue Title V permits from 978 days to 743 days by concentrating on issuance of the older applications.

Future tasks that face the Permitting Section include the issuance of the remaining original Title V permits by 2003, the issuance of Title V permit renewals beginning in 2002, and the issuance of remaining PSD construction permits and their subsequent operating permits.
Promoting an appreciation of Oklahoma’s clean air is a goal of the Air Quality Education Committee.

The Air Quality Division is unique in having a dedicated education committee, which has been active since 1995. Its membership is comprised of enthusiastic Air Quality employees who volunteer to actively promote air education and environmental awareness.

Over the past 5 years, the committee has reached thousands of Oklahomans.

This has been accomplished through the development of materials that aid in helping the public become more aware of air and the importance of good air quality. "Understanding Air Pollution in Oklahoma" is a comic book the committee developed to teach school children about how ambient air is monitored. Other materials developed through the committee include Air Quality Index (AQI) brochures, magnets, coloring books, bookmarks, glossary sheets, and posters. Committee members also design and assemble interactive displays. A favorite is the Air Quality Quiz box. Kids can test their Air Quality IQ by answering a variety of questions. They are entertained and educated with the lights and buzzes this hands-on display generates.

Speakers from the committee and AQD are available for classroom lectures, conservation resource days, conferences, environmental fairs and community events.

Through continued commitment to education, members have shown their dedication to help Oklahoman’s learn about this valuable resource.
Tribes and consultants regularly request information on air quality for Environmental Impact Assessments. Tribes are required to conduct environmental assessments for construction projects that depend on federal funds. The majority of Tribal Projects include new home construction, rehabilitation of existing homes, and the expansion of utilities. Industry requests concern everything from clearing right-of-way for expansion of public utilities to a Fire Management Plan. Requestors specifically want to know the impact their proposed projects will have on local air quality.

The Air Quality Division (Aqd) reviews each project and determines the extent of impact on air quality. The Technical Resources and Projects Section responds to most inquiries, such as those concerning home construction or rehabilitation, with a form letter. An individual response is drafted for inquiries concerning any industrial activity or prescribed burning. The Aqd responded to 224 Environmental Impact inquiries during FY 2001, compared to 125 Environmental Impact inquiries in FY 2000. Despite this 56 percent increase in workload, the Aqd continues to have approximately a 2-day turn around on general inquiries.

For a substantial portion of the year, the members of the Emissions Inventory Section work diligently at entering emission data from facility submittals into the TEAM database and ensuring the data’s accuracy. This data was once a rare resource for anyone outside the Emissions Inventory Section, because software constraints and security measures made extracting the information on a timely basis a difficult task. But now, through an expansion of TEAM (a Division-wide database), the records are more readily available, allowing anyone within AQD to access this valuable treasure of information. Some examples of available information include any particular facility’s pollutant data, process data, and stack data sorted by emission point. A summary of a facility’s annual operation can be generated in hardcopy and utilized for a number of applications, such as fieldwork or compliance issues. It is the Division’s goal to utilize TEAM to allow industry to file its facilities’ operations and emissions information in an electronic format that will maximize the data’s accuracy and usefulness, while minimizing the time and resources required of both the affected industries and the Agency.
The DEQ Lead-Based Paint (LBP) Program continues to grow. The U.S. Housing and Urban Development’s LBP regulation became effective this year. With these new requirements, DEQ’s LBP certifications are in high demand throughout Oklahoma. The DEQ LBP Program has issued 345 certifications this year, which is nearly triple the 124 certifications issued during FY 2000 (see Appendix for breakdown). All LBP certification applications undergo a thorough review process to ensure that all requirements are met.

Similarly, the number of LBP-related activities being performed in Oklahoma has nearly doubled. Certified LBP professionals report their LBP detection and reduction activities to DEQ each quarter. DEQ certified LBP professionals reported 693 lead paint detection and reduction activities in FY 2001 compared to 359 in FY 2000. All applications and quarterly reports were processed in a timely manner according to standard operating procedures, even though the certification workload doubled.

All LBP complaints are handled through the cooperative efforts of the Environmental Complaints and Local Services Division, the Air Quality Compliance Section, and the Technical Resources and Projects Section. DEQ LBP staff received eight complaints during this reporting period and resolved all complaints within 90 days.
TAR CREEK AREA - DEQ staff provided technical expertise and public education regarding lead hazards to Tar Creek area residents by addressing questions about Lead-based Paint (LBP) hazards at community meetings. The DEQ LBP staff attended a Commerce Town Meeting on August 14, 2001 and the Third Annual Tar Creek Conference held in Miami, OK during the week of May 1, 2001. DEQ staff also provided lead education materials to the Ottawa County Health Department and trained the Miami and Jay area ECLS Representatives to offer immediate assistance at LBP abatement projects in the Picher area.

AREAS WITH SIGNIFICANT INCIDENCE OF ELEVATED BLOOD LEAD LEVELS - The DEQ also conducted outreach in other areas of the state with significant incidence of elevated blood lead levels, in conjunction with the Oklahoma State Department of Health. The DEQ LBP staff provided technical assistance and equipment to assist the health department with environmental investigations in homes where the children have been identified as having elevated blood lead levels (EBL’s). DEQ supplied the health department with approximately 5000 educational pamphlets for distribution to county health departments. At the request of the State Health Department, DEQ LBP staff made suggestions to improve documentation of EBL investigations.

IMMEDIATE EDUCATIONAL RESPONSE - The DEQ responded to tips from certified LBP professionals about renovators who were unaware of current LBP regulations and, as a result, potentially creating a source of lead exposure for children. In one case, a church-housed daycare center became a potential lead exposure for children. In one case, a church-housed daycare center became a potential lead exposure for children. Lead-contaminated dust was spread throughout the church while a contractor stripped and repainted the church windows. Upon receiving a tip about the situation from a certified LBP professional, the DEQ provided educational material to the daycare center and the children’s families and worked with the Oklahoma City-County Health Department to ensure the children received blood lead tests. A DEQ certified LBP professional worked after hours to clean up the lead-contaminated dust in the church, making it safe for the children to attend their daycare center. These efforts reduced the children’s potential exposure to lead. In another case, a family’s home became a potential source of lead poisoning during window replacement. Upon receiving this tip, the DEQ educated the family about lead hazards, documented the potential lead hazards, gave them cleaning supplies to remove the construction dust from their home, and encouraged the parents to have their children tested for lead. In both cases, DEQ notified EPA of

Pictured above are a family that recently refurbished their older home, including removing the lead-based paint that had been on the exterior for many years.
possible violations of federal regulations.

COOPERATION WITH HUD -
DEQ staff participated in panel dis-
cussions at two U.S. Housing and
Urban Development (HUD) LBP
regulation training conferences held
in Oklahoma. Approximately 150
HUD grant recipients attended these
meetings. The DEQ LBP program
staff took this opportunity to intro-
duce the LBP certification process
and help the HUD grantees deter-
mine whether or not to seek LBP
certification for any of their person-
nel. DEQ staff worked in coopera-
tion with the Oklahoma City HUD
Office to increase attendance at
HUD-sponsored accredited LBP
training and Lead-Safe Renovation
and Remodeling courses. DEQ
achieved this task by mailing let-
ters to currently and previously cer-
tified LBP Firms.

EDUCATING DEQ CERTI-
FIED LBP PROFESSIONALS -
During the certification renewal pe-
riod – January 15-March 31, 2001
– certified LBP professionals ex-
pressed concerns and confusion
about LBP services the HUD LBP
regulation requires for federally as-
sisted housing. To alleviate any
possible confusion, the DEQ LBP
staff provided HUD’s LBP regula-
tion to the students at four initial
and eight refresher LBP training
courses, and introduced the LBP ser-
vice created by HUD to DEQ certi-
tified LBP professionals. Each issue
of the “Air Quality Update” includes
a segment to update LBP profession-
als of developments in the LBP Pro-
gram at the state and federal level.

CERTIFICATION PROCESSES - DEQ staff presented in-
formation on Oklahoma’s initial and
renewal certification processes at six
initial LBP training courses and eight
refresher LBP training courses dur-
ing FY 2001. Certification expiration
notices were mailed on April 4,
2001 and again on May 7, 2001 via
certified mail to all individuals who
had not renewed their certification.

The LBP staff responded to several inquiries concerning LBP
on commercial structures. Since Oklahoma LBP regulations do
not apply to commercial structures, the LBP staff refers callers
with concerns related to worker safety and waste management
regulations to others with responsibility to enforce them, such as
the Occupational Safety and Health Administration (OSHA) and
DEQ’s Land Protection Division.
Do You Dehy?
TRPS Assists With Complex MACT Standards

"I change my compressor station’s dehydration unit, can I avoid those new rules?" "Is there a problem with the used dry cleaning machine I just bought?" "What’s a ‘storage vessel with potential for flash emissions?’" These are just a few of the questions answered by the Air Quality Division’s Technical Resources and Projects Section. But TRPS doesn’t just hang around waiting for concerned business owners to call them. They’ve been busy looking for issues that affect their customers and reaching out to assist them. TRPS has focused a good part of this outreach effort on those affected by EPA’s MACT Standards.

During the past decade, EPA has issued National Emission Standards for Hazardous Air Pollutants (NESHAPs) for a number of industry categories. These “MACT Standards,” based on the Maximum Achievable Control Technology, can be rather complicated, with the meaning buried under layers of technical regulatory language. Over the years, AQD has conducted a number of efforts to assist Oklahoma’s businesses to sift through the requirements, identify whether a standard actually applies to them, and meet those requirements in the simplest, most cost-effective way possible. To meet the standards, many facilities must add or make changes to processes. Virtually all require filing paperwork. Many of the standards include a pollution prevention option to meet the requirements, which may simplify testing and paperwork. In some cases, there are options available to make changes and avoid being subject to a standard.

Dry Cleaners
This year, TRPS wrapped up an outreach to the state’s dry cleaners, many of which use trichloroethylene (also known as perchloroethylene or just “perc”) in their dry cleaning process. Out of over 500 dry cleaning locations, many of which are just pick-up locations, AQD has identified 164 facilities that use perc and are subject to the MACT standard (NESHAP M). By tracking and identifying these facilities, Oklahoma can insure compliance and assist these small businesses in avoiding penalties and other unnecessary expenses sometimes associated with federal regulations.

Fiberglass and Cultured Marble
In 1999, TRPS became aware of several fiberglass boat manufacturers were potentially affected by new EPA-approved methods for estimating styrene emissions from certain manufacturing processes. Since these emissions estimates could determine whether a permit is required, TRPS contacted all 28 Oklahoma facilities potentially affected and assisted them in reviewing their permit and compliance status. While none of these facilities are expected to be affected by a proposed MACT Standard for Reinforced Plastics Composites Production Source Category, several required permits, and all are now in a position to understand the effects of increased production or new standards that might affect their facility.

As a result of information received through the fiberglass outreach, TRPS also conducted an outreach to facilities that produce cultured marble. Cultured marble is a material typically used for bathroom and kitchen countertops and sinks. While emissions from these facilities are generally lower than in other fiberglass manufacturing processes, they can be significant sources of styrene. Because of the relatively few number of cultured marble manufacturers in Oklahoma (less than 25 potentially affected facilities), a direct telephone contact approach was chosen. Through this efficient use of AQD resources, TRPS staff was able to confirm that 15 of the 16 facilities still operating have emissions below the level considered de minimis under AQD rules. Due to their low level of emissions, they would also not be affected by the MACT Standards for the Reinforced Plastics Composites Production Source Category. TRPS is continuing to work with the remaining facility to determine whether a permit requirement or standard applies to it.
Oil & Gas

Many oil and gas facilities include dehydration units that, as the name implies, remove water from a raw natural gas stream. The problem is that the units also remove some other compounds, which may be emitted to the atmosphere. These chemicals can include benzene and other hazardous air pollutants (HAPs). Other processes at oil and gas facilities also potentially emit HAPs. EPA’s MACT Standard specifies control requirements for larger facilities, and gives them until June 2002 to either meet the requirements or document (e.g., through requirements of an AQD permit) that their actual emissions are below the level considered a “major source.”

TRPS began this outreach effort by developing and mailing a form designed to assist companies in evaluating their facilities and fulfilling EPA’s notification requirements. The first goal was to make sure that affected customers were aware of the MACT Standard with enough lead-time to either meet the requirements or successfully avoid applicability before the compliance deadline. TRPS received written responses covering nearly 1000 facilities or approximately 75 percent of those targeted for outreach. As expected, only about 20 facilities believe they are actually subject to the Standard. Several facilities apparently made this determination as a direct result of TRPS outreach. Many more were able to document that they are not subject to the Standard.

Metal Finishers

Metal finishers that perform chromium electroplating and anodizing or halogenated solvent (e.g., trichloroethylene) cleaning are affected by MACT Standards that have been in place for several years. Many of the affected facilities are small businesses, without adequate resources or expertise in environmental matters. TRPS has participated in the Agency’s Metal Finishers Outreach program, led by DEQ’s Customer Services Division as part of a nationwide outreach effort. While information has been provided through workshops and other means, working one-on-one with individual facilities has been the outreach’s emphasis, to better assist them in complying with environmental requirements. Results have been extremely encouraging, both in terms of the number of facilities participating and their progress towards full compliance.

Medical Incinerators

Several years ago, EPA issued emission standards, similar to MACT standards, for small medical waste incinerators. Because of the nature of the waste involved, the resulting standards are quite complex. It is not generally cost-effective for hospital incinerators to take the steps that would be required to comply with these standards and to continue operating. TRPS assisted in an outreach program to document that the affected incinerators were properly taken out of service. As a result, all potentially affected incinerators have met EPA’s documentation requirements.
The AQD’s Technical Resources and Projects Section (TRPS) has been given a greater role in review of modeling conducted to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) for criteria pollutants and the Maximum Acceptable Ambient Concentrations (MAAC) for Subchapter 41 Toxic Air Contaminants (TACs). TRPS is a first contact on modeling issues for new major sources of air pollutants and is a continuing partner to the permitting staff from application review to issuance of the final permit. Some changes in review methods have resulted from funneling much of the modeling reviewed by the Division through TRPS. These changes are most clearly evidenced by the issuance of the annual baseline date report and the development of the new ARIES database.

In order to streamline the permit application and modeling review process, the TRPS staff have compiled a statewide annual baseline date report for evaluating Prevention of Significant Deterioration (PSD) increment. The report is available both to the applicant and the AQD staff and shows the list of counties that have been impacted by, or contain new major sources of air pollutants. Once a county is “triggered” by the submittal of a PSD construction permit application (a new major source), the minor source baseline is set and establishes the maximum growth limit for the pollutant of concern. The report will simplify for the applicant and AQD staff the somewhat time intensive method of researching the facility history of each county upon receipt of a PSD application. In addition, the report provides AQD staff a tracking mechanism for evaluation of PSD increments to ensure continued compliance with the National Ambient Air Quality Standards (NAAQS).

In an effort to provide timely assistance to permit applicants, TRPS produced ARIES, the Area Reported Inventory of Emissions Survey. Given a proposed emission point location (origin) and a radius, ARIES will provide a spreadsheet of all Oklahoma inventoried emission sources that fall within the circumscribed area. The emission and stack information provided by ARIES is then available to the applicant to use in its modeling. ARIES is a vast improvement over the previous method of providing hard copies of information on all inventoried emission sources, county by county. This tool both assures accuracy and increases efficiency for applicants and the DEQ.
Another hallmark of quality DEQ operations is the Air Quality Division’s standalone Quality Assurance Section. In response to EPA’s 1984 Order 5360.1 (establishing requirements for mandatory quality assurance for all environmental data collected), AQD established the independent Quality Assurance Section. The QA group’s mandate is to ensure that all data used or produced by AQD is of quality commensurate with its ultimate intended use. The result has been that Oklahoma is at the forefront in producing and maintaining high quality data relating to the quality of its air.

The Tools

In its earliest stages, the primary mission of the Quality Assurance Section was ensuring the accuracy of ambient air monitoring operations. This remains a key commitment. To meet this commitment, the QA Section employs a variety of tools.

- Conducting independent audits on all air monitoring sites and monitors throughout the state.
- Certifying that all equipment and gaseous standards used by the Air Monitoring and QA staffs are traceable to National Institute of Standards and Technology (NIST) standards. The QA Section certifies most of the instruments in its own lab and tracks vendor-supplied certifications of all other equipment and gases.
- Validating air monitoring data as complete and accurate by detailed review of 100 percent of collected data.
- Tracking and reviewing calibrations and quality control checks performed by the Monitoring staff.
- Participating in the National Performance Audit Program and inter-agency audits to ensure comparability of air monitoring data across the nation.
- Providing technical advice and assistance to the Monitoring staff.
- Providing data management support.
- Reviewing Standard Operating Procedures and processes. These tools are described in the Ambient Air Monitoring Quality Assurance Project Plan (QAPP). EPA requires that all data collection operations be covered by and subject to a Quality Assurance Project Plan. The QA Section develops QAPPs as a kind of toolbox, containing not only the tools needed to ensure completeness, representativeness and accuracy of data, but also describing in detail how data is collected, managed and used.

Continued on next page

Pictured is Tracy Henderson, ensuring equipment accuracy for Quality Assurance evaluations of air monitoring instruments.
The Challenges

As the Air Quality Division has matured, the need for quality assurance practices has increased. The QA Section has met this challenge by extending its expertise to assist other Air Quality sections in program development and coordinating projects with the Compliance, Enforcement, Permitting, Emissions Inventory and Technical Resources Sections.

The QA Section has been particularly active in the area of data management. Working closely with other sections and the regional EPA office, QA has been instrumental in establishing Oklahoma as a model in the management of data involving pollutant-emitting facilities. The AQD facilities data management system, utilizing the TEAM database and the Universal Compliance Interface System has been recognized in numerous national forums as a leader in producing high quality facility-related information. Oklahoma is the first state in the nation to use this link to the national AFS database. The most recent such recognition came at the 2001 National AIRS Conference. A Technical Systems Audit of the AQD facilities data management system, conducted by EPA in May 2001, revealed zero deficiencies, and the facilities data management QAPP has been distributed by EPA to other states, as an example of both a well-written document and a well-run data quality system.

The QA Section continues to work with the Compliance, Enforcement and Technical Resources Sections to refine the facilities data management system and keep up with the latest national developments. In other areas, the QA Section is currently working with the Emissions Inventory group in developing its electronic reporting project, as well as incorporating emissions data into the TEAM database. QA has also provided technical assistance to the Emissions Inventory Section in the area of emissions monitoring.

Shifting priorities in the national monitoring strategy has also kept this Section on its toes. In the past year, the QA Section has been active in such projects as beta testing the re-engineered Air Quality System (the national database of ambient air quality data), refinement of the fine particulate monitoring program, start-up of the chemical speciation monitoring program, and assisting in the development of the Interagency Monitoring of Protected Visual Environments (IMPROVE) program.

To ensure that Oklahoma’s interests are voiced and protected, QA participates in numerous regional and national forums on quality assurance, air monitoring, data management and analysis. One of the most significant extra-departmental activities of the Section has been engaging and providing technical support to tribal monitoring programs. In particular, the Section has worked closely with the Inter-Tribal Environmental Council (ITEC) in establishing and refining its monitoring program. In September 2000, QA partnered with the regional office of EPA to conduct a Technical Systems Review of that program.

In trying to meet the needs of the various sections, projects and agencies with which it is involved, Air Quality Division’s Quality Assurance Section can be said to wear many hats, but continual process improvement while maintaining data quality remains the ultimate goal of the Quality Assurance program.
Power to the People

Potential electric utility deregulation, tax incentives and a strong increase in demand for electricity nationwide have led to a highly publicized influx of Air Quality permit applications in Oklahoma for the construction of new gas-fired power plants. These proposed plants range in megawatt capacity from just over 300 Mw to 1200 Mw. All of these projects are classified as major sources and require New Source Review (NSR) and Prevention of Significant Deterioration (PSD) analysis and public review.

Of the 20 applications for power plant projects received during FY 2001, AQD’s Permitting Section has issued 11 PSD permits, with the remaining nine applications in various stages of review. The size and complexity of these facilities and the intricate review required generally make the issuance of a PSD permit a 12-month process. This means that the Permit Section can no longer place the burden of PSD permitting on the shoulders of one or two experienced engineers, while the rest of the staff writes simpler permits for other facilities. These 20 applications were assigned to 12 different engineers. Future applications will involve additional staff. If all the proposed plants are built, the electric generation megawatt (Mw) capacity in Oklahoma will more than double the existing 12,166 Mw capacity to 25,692 Mw. These new gas-fired facilities are much cleaner than the existing facilities, in that they will emit an average of 1.5 tons of nitrogen oxides (NOx) per Mw. Existing coal-fired plants emit an average of 12.1 tons of NOx per Mw, and existing gas-fired plants emit an average of 3.7 tons of NOx per Mw. The maps on page 57 show all existing and proposed new facilities and their type of fuel used, generating capacity, NOx emissions and tons of NOx per megawatt.

One result of this influx of proposed major size facilities is the rapid maturity of the Air Quality permit engineers. Education concerning PSD and NSR rules, regulations and requirements has been necessary for all engineers instead of just an experienced few. With this experience and hard work has come an increased confidence and expertise for all the staff. Thus, we are better able to serve the citizens of Oklahoma and protect the environment through accurate and effective permitting.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Fuel Type</th>
<th>Gen. Cap. Mw</th>
<th>Ann. NOx Tons/year</th>
<th>NOx Tons Per Mw</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSKOGEE – OG&amp;E</td>
<td>COAL</td>
<td>1716</td>
<td>18,139</td>
<td>10.6</td>
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<tr>
<td>SOONER - OG&amp;E</td>
<td>COAL</td>
<td>1136</td>
<td>14,741</td>
<td>12.9</td>
</tr>
<tr>
<td>NORTHEASTERN – AEP/PSO</td>
<td>COAL</td>
<td>882</td>
<td>15,544</td>
<td>17.6</td>
</tr>
<tr>
<td>GRDA</td>
<td>COAL</td>
<td>1010</td>
<td>12,603</td>
<td>12.5</td>
</tr>
<tr>
<td>HUGO – WFEC</td>
<td>COAL</td>
<td>400</td>
<td>4,836</td>
<td>12.1</td>
</tr>
<tr>
<td>AES SHADYPOINT</td>
<td>COAL</td>
<td>350</td>
<td>828</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>COAL</td>
<td>5,494</td>
<td>66,691</td>
<td>12.1</td>
</tr>
<tr>
<td>COMANCHE – AEP/PSO</td>
<td>GAS</td>
<td>281</td>
<td>3,984</td>
<td>14.2</td>
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<td>SOUTHWESTERN – AEP/PSO</td>
<td>GAS</td>
<td>448</td>
<td>2,325</td>
<td>5.2</td>
</tr>
<tr>
<td>TULSA – AEP/PSO</td>
<td>GAS</td>
<td>612</td>
<td>1,654</td>
<td>2.7</td>
</tr>
<tr>
<td>RIVERSIDE – AEP/PSO</td>
<td>GAS</td>
<td>882</td>
<td>3,892</td>
<td>4.4</td>
</tr>
<tr>
<td>WELEETKA – AEP/PSO</td>
<td>GAS</td>
<td>163</td>
<td>181</td>
<td>1.1</td>
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<tr>
<td>SEMINOLE – OG&amp;E</td>
<td>GAS</td>
<td>1701</td>
<td>4,352</td>
<td>2.5</td>
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<tr>
<td>HORSESHOE LAKE – OG&amp;E</td>
<td>GAS</td>
<td>824</td>
<td>1,166</td>
<td>1.4</td>
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<tr>
<td>CONOCO – OG&amp;E</td>
<td>GAS</td>
<td>66</td>
<td>459</td>
<td>6.9</td>
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<tr>
<td>ENID – OG&amp;E</td>
<td>GAS</td>
<td>60</td>
<td>68</td>
<td>1.1</td>
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<tr>
<td>TINKER – OG&amp;E</td>
<td>GAS</td>
<td>96</td>
<td>13</td>
<td>0.1</td>
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<tr>
<td>WOODWARD – OG&amp;E</td>
<td>GAS</td>
<td>11</td>
<td>1.2</td>
<td>0.1</td>
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<tr>
<td>MUSTANG – OG&amp;E</td>
<td>GAS</td>
<td>385</td>
<td>2,299</td>
<td>5.9</td>
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<tr>
<td>TULSA – WFEC</td>
<td>GAS</td>
<td>170</td>
<td>591</td>
<td>3.5</td>
</tr>
<tr>
<td>POWERSMITH</td>
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<td>112</td>
<td>510</td>
<td>4.5</td>
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<tr>
<td>MOORELAND – WFEC</td>
<td>GAS</td>
<td>305</td>
<td>592</td>
<td>1.9</td>
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<tr>
<td>ANADARKO – WFEC</td>
<td>GAS</td>
<td>300</td>
<td>2452</td>
<td>8.1</td>
</tr>
<tr>
<td>CUSHING, CITY OF</td>
<td>GAS</td>
<td>25</td>
<td>181</td>
<td>7.2</td>
</tr>
<tr>
<td>FAIRVIEW, CITY OF</td>
<td>GAS</td>
<td>3</td>
<td>8</td>
<td>0.8</td>
</tr>
<tr>
<td>KINGFISHER, CITY OF</td>
<td>GAS</td>
<td>9</td>
<td>8</td>
<td>0.8</td>
</tr>
<tr>
<td>LINDSAY, CITY OF</td>
<td>GAS</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANGUM, CITY OF</td>
<td>GAS</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OK MUNICIPAL POWER AUTHORITY</td>
<td>GAS</td>
<td>154</td>
<td>81</td>
<td>0.5</td>
</tr>
<tr>
<td>PAWHUSKA, CITY OF</td>
<td>GAS</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STILLWATER, CITY OF</td>
<td>GAS</td>
<td>33</td>
<td>7</td>
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<tr>
<td></td>
<td>GAS</td>
<td>6,672</td>
<td>24,816.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>12,166</td>
<td>91,507.2</td>
<td>7.5</td>
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</table>

All data is from the 1999 emissions inventory of reported values  Updated 8/13/01
## Table 2
### New Electric Generation

<table>
<thead>
<tr>
<th>Facility</th>
<th>Permit Status</th>
<th>Fuel</th>
<th>Gen.CapMW</th>
<th>Fuel/yr.BCF</th>
<th>Ann. NOx Tons/NoxPerMW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Units (Comb. Cycle)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AECI – CHOUTEAU</td>
<td>Issued</td>
<td>GAS</td>
<td>530</td>
<td>23.7</td>
<td>774</td>
</tr>
<tr>
<td>COGENTRIX- JENKS</td>
<td>Issued</td>
<td>GAS</td>
<td>800</td>
<td>35.8</td>
<td>806</td>
</tr>
<tr>
<td>C&amp;SW – OOLOGAH</td>
<td>Issued</td>
<td>GAS</td>
<td>492</td>
<td>22.0</td>
<td>887</td>
</tr>
<tr>
<td>CALPINE – COWETA</td>
<td>Issued</td>
<td>GAS</td>
<td>1,000</td>
<td>44.7</td>
<td>1,174</td>
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<tr>
<td>DUKE – NEWCASTLE</td>
<td>Issued</td>
<td>GAS</td>
<td>520</td>
<td>23.2</td>
<td>508</td>
</tr>
<tr>
<td>ENERGETIX- ARCADIA</td>
<td>Proposed</td>
<td>GAS</td>
<td>1,100</td>
<td>49.2</td>
<td>1,660</td>
</tr>
<tr>
<td>ENER. THUNDERBIRD</td>
<td>Public Rev.</td>
<td>GAS</td>
<td>825</td>
<td>36.9</td>
<td>1,078</td>
</tr>
<tr>
<td>KIOWA – KIAMICHI</td>
<td>Issued</td>
<td>GAS</td>
<td>1,200</td>
<td>53.6</td>
<td>1,845</td>
</tr>
<tr>
<td>SmithCoGen – POCOLA</td>
<td>Proposed</td>
<td>GAS</td>
<td>1,200</td>
<td>53.6</td>
<td>1,964</td>
</tr>
<tr>
<td>SmithCoGen. - LAWTON</td>
<td>Tech. Rev.</td>
<td>GAS</td>
<td>600</td>
<td>26.8</td>
<td>1,487</td>
</tr>
<tr>
<td>ENER., – WEBBERS FALLS</td>
<td>Public Rev.</td>
<td>GAS</td>
<td>850</td>
<td>38.0</td>
<td>974</td>
</tr>
<tr>
<td>TENASKA - SEMINOLE</td>
<td>Tech. Rev.</td>
<td>GAS</td>
<td>1,200</td>
<td>53.6</td>
<td>2,052</td>
</tr>
<tr>
<td>ENERGETIX – GREAT PLAINS</td>
<td>Tech. Rev.</td>
<td>GAS</td>
<td>900</td>
<td>40.2</td>
<td>1,273</td>
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<tr>
<td>DUKE - STEPHENS</td>
<td>Admin Rev</td>
<td>GAS</td>
<td>620</td>
<td>27.7</td>
<td>386</td>
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11,837 529.0 16,868 1.4

<table>
<thead>
<tr>
<th>Peaking Units (Simp. Cycle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OG&amp;E - HORSESHOE</td>
</tr>
<tr>
<td>ONEOK - EDMOND</td>
</tr>
<tr>
<td>KM PWR - PITTSBURG</td>
</tr>
<tr>
<td>WFEC – ANADARKO</td>
</tr>
<tr>
<td>MUSTANG – MUSTANG</td>
</tr>
<tr>
<td>MUSTANG - HARRAH</td>
</tr>
</tbody>
</table>

1,634 17.4 3,613 2.2

**Grand Totals**

13,551 546.4 420,48 1.5

According to the Energy Information Administration State Energy Data Report 1997 (latest available), Oklahoma Electric Utilities used 129 BCF of gas in 1997. Total Oklahoma usage of natural gas was 560 BCF. Residential usage was 72 BCF.
The DEQ Regional Office at Tulsa (ROAT) is unique in many ways. Foremost, it is the DEQ’s only combined-media satellite office in the state. The regional office consists of thirteen AQD staff, ten ECLS staff, one WQD staff, and one Environmental Attorney. The ROAT provides services to thirty Oklahoma counties, encompassing the eastern one-third of the state.

Being geographically removed from the Central Office, the ROAT prides itself on inter-division and inter-program cooperation and a “can do” attitude without quick access to administrative support. Despite slow computer connections to critical software (e.g., TEAM, and Complaint System databases), the regional office concept provides a high degree of service to the people of Oklahoma through increased availability and timely response. Many citizens and industry representatives have expressed appreciation for quick access to DEQ’s professional services.

The Air Quality Division component of the ROAT consists of Enforcement/Compliance, Permitting, and Monitoring Sections. The program is supported by a full-time Environmental Attorney. The ROAT takes pride in the close cooperation and teamwork among sections. Case management decisions are typically based on a concerted effort among the sections. This relationship is augmented by an open door policy toward consultants and industry representatives. This business philosophy is a quality management approach to providing environmental services to the regulated community and citizens.

The ROAT’s customers include a wide variety of industries, requiring flexibility in staff assignments. Manufacturing, petroleum refineries, chemical plants, oil and gas production and processing, power plants, and aerospace industries provide constant regulatory and permitting challenges for the staff. The Enforcement/Compliance section conducted 198 inspections for FY 2001 (37 percent of the AQD total). The Permitting section conducted 41 initial compliance inspections for FY 2001 (22 percent of the AQD total) and issued 77 permits.

The Enforcement/Compliance Section conducted initial investigations of air quality complaints in Tulsa County. The section also investigates complaints referred by the central office that originate in surrounding counties. Complaints are assigned to staff on a rotating basis. The Enforcement/Compliance Section investigated a total of 146 complaints for FY 2001.

The Enforcement/Compliance Section issued 30 Notices of Violation (NOV’s) and Requests for Information (RFI) during FY 2001 (31 percent of the Division total). Two Consent Orders were also executed.

One Enforcement/Compliance Section staff member is assigned to a full-performance asbestos program. The program emphasizes inspections at the beginning, midpoint, and end of each abatement project, and is closely coordinated with the Oklahoma Department of Labor. Complaints, enforcement, analytical services, and training sessions round out the asbestos program. The asbestos program conducts approximately 375 compliance inspections annually (94 percent of the AQD total).

The City of Tulsa received an EMPACT Grant from EPA, which provides for two new ozone monitoring sites and three new weather stations. The focus of the project is to provide real-time environmental data to empower citizens to make health-based decisions based on current pollutant levels. Partners in the grant include the City of Tulsa, DEQ, INCOG, University of Tulsa, USGS, and the Allergy Clinic of Tulsa.

The ROAT has been consistently involved with current EPA refinery initiatives. Staff participated in EPA In-depth Refinery Investigations this year at both Tulsa refineries.
Rules are the state counterpart to federal regulations. They are how state agencies execute law. Rules are important to individuals and industry because mere nuances of rules can have a profound impact on people’s lives. For example, rules determine whether a person burns his/her trash or has it hauled to a landfill. Rules decide whether a company must do extensive air modeling and testing before expanding its manufacturing line. Rules make practical application of national environmental policy. They draw the line that protects Oklahoma’s blessed natural resources, while guiding development of those same resources and providing opportunities for Oklahomans to live well and work here.

Who’s Making the Rules?

AQD’s Rules Unit follows a very specific protocol for establishing rules. Issues are analyzed as to their impact on the state and cost to the state’s industry. The Air Quality Advisory Council serves as the initial rulemaking body for air quality issues. The nine members of the Council are appointed by the Governor to represent specific stakeholder groups.

The Council seeks input from the public and the regulated community through hearings they conduct across the state. Advanced notice of these meetings is given both in the Oklahoma Register and on the DEQ web page. Draft rules are prepared by staff and presented to the Council. The Council reviews the rules, considers comments on the rules, then, if approved, the AQ Advisory Council recommends rules to the Environmental Quality Board for further action. Rules adopted by the Environmental Quality Board are then presented to the legislature for review.

Meet the Rule Makers

The Air Quality Advisory Council

William B. Breisch
Council Member since 1972
Representing: Engineering Chairman
Breisch Engineering
Tulsa, Oklahoma

Sharon O. Myers
Vice Chairman
Council Member since 1997
Representing: General Industry Environmental Manager
Holnam Inc.
Ada, Oklahoma

Fred A. Grosz, Ph.D
Council Member since 1998
Representing: General Public Interim Dean (now retired)
University of Central Oklahoma
Edmond, Oklahoma

Gary A. Kilpatrick
Council Member since 1988
Representing: Transportation Staff Director
Phillips Petroleum
Bartlesville, Oklahoma

Leo Fallon
Council Member since 1999
Representing: Local Government Mayor (now retired)
Frederick, Oklahoma

David A. Branecky
Council Chairman
Council Member since 1994
Representing: Utility Regulatory Coordinator
Oklahoma Gas & Electric
Oklahoma City, Oklahoma

Robert A. Lynch
Council Member since 2001
Representing: Higher Education Associate Professor
OU Health Sciences Center
Oklahoma City, Oklahoma

Joel F. Wilson
Council Member since 1998
Representing: Petroleum Leader of Air Compliance
Conoco
Ponca City, Oklahoma

Rick W. Treeman
Council Member since 1999
Representing: Agriculture Compliance Manager
Johnston Enterprises Inc.
Enid, Oklahoma

Pictured below are the members of the Air Quality Advisory Council: back row, left to right, Leo Fallon, David A. Branecky, Robert A. Lynch, Joel F. Wilson, and Fred A. Grosz, front row, left to right: Rick W. Treeman, Sharon O. Myers, William B. Breisch, and Gary Kilpatrick.

A special thanks to Mayor Fallon for the expertise he brought to the Council. We will miss you.
Re-Right/De-Wronging the Rules

The Re-Right/De-Wrong Initiative

The Re-Right/De-Wrong Initiative is an on-going effort to simplify the rules. The initiative’s goal has been to clarify intent, to make rules easier to understand, for both the regulators and the regulated. This process was spearheaded by DEQ’s executive director and later adopted as a statewide initiative. Industry and agency inspectors alike have appreciated it, as they have had the opportunity to tell the Agency what the rules mean to them and how they approach compliance. The goal has been to sync up both parties’ definitions of compliance so that efforts by industry to comply are acknowledged by the personnel who assess it.

Who’s Exempt from the Rules?

The Permit Continuum

Streamlining never stops. AQD’s part in the Agency’s Permit Continuum concept allocates Division resources according to the level of risk of environmental harm posed by the state’s emission sources. AQD is presently assessing the pros and cons of creating a “Permit Exempt” category for facilities that emit less than forty tons of any criteria pollutant. The Division believes that ambient air quality will not be negatively affected and that Agency efforts will be more productive since staff will be freed to concentrate on areas of greater potential for pollution reduction. This effort must be accompanied by a demonstration to EPA Region VI that the change will not disrupt ambient air quality in the state.

Want to Change the Rules?

Work Groups

Citizens are involved in rulemaking throughout the process, but a vital tool for the Agency is the Work Group. AQD asks for volunteers, then “drafts” people from the regulated community and the public to round out the group that is assigned to study problems of a particular regulation. At present Subchapter 31 and Subchapter 41 are being studied by work groups. The Subchapter 31 work group is trying to simplify the rules controlling emissions of sulfur compounds. The Subchapter 41 work group has the difficult assignment of assessing emissions of toxic pollutants. (No one ever said the work was easy.) Anyone interested in serving on an Air Quality work group in the future should call the Air Quality Division at 405 702 4100 and ask for the Rules Unit.

New Rules, Already?

Looking Ahead

AQD is gathering information for the future. On the horizon is a federal plan commonly called Regional Haze. It is a mandate to clear the air in National Parks and Wilderness Areas. Science shows reduced visibility in parks across the country, but the efforts to stem pollution in these areas cannot be strictly local. This pollution results from a combination of industry emissions – some of which are hundreds of miles away from the problem – and natural phenomena, that are making it difficult to enjoy national parks on all but the clearest days. The Regional Haze initiative explores control of air pollution through multi-state assessment, and proposes the use of new incremental control tools such as NOx trading and Best Available Retrofit Technology (BART), while balancing the country’s current and future demands for energy. Implementation of any of these options to control regional haze will require AQD’s Rules Unit to develop proposed changes to Air Quality rules.
The Gang of Four

Since March 1996, the Air Quality Division has received 430 Title V operating permit applications and 23 modification requests. Originally, implementation of the program presented a daunting task for the Permit Section. Development of application forms, standard permit language and permit formats required a major effort by the permit staff before any permits could be issued. Education of the staff was also necessary in order to prepare them for this effort.

This year was a record year for issuance of Title V permits. Our staff has gained the experience necessary across the board to be able to address these complicated permits on a continual basis. As shown on Map 1, Oklahoma is one of the leading states in percentages of issuance of the initial Title V permits and synthetic minors to avoid Title V. Oklahoma is also recognized as a leader in the quality of the permits issued.

This past year the staff experi-
enced a personnel turnover rate that would have led to the prediction of a significant downturn in permit issuance. However, 15 staff engineers who were here the entire year issued 91 Title V permits. That is an average of 6 Title V permits per engineer in addition to an almost overwhelming influx of Prevention of Significant Deterioration (PSD) construction permit applications. This pace of issuance suggests that the initial round of Title V permits should be completed and issued by early to middle 2003.

Since Title V permits each have a 5-year life, some renewals will be due during 2002. The number of renewals due each year will increase dramatically in 2003 and will present a future challenge to the staff.
How often do you consider the “cleanliness” of the air you breath? Daily? Weekly? Only on ozone alert days? The Air Quality Division of the Department of Environmental Quality strives every day to make advances toward cleaner air in Oklahoma. Through compliance inspections and enforcement actions, the Air Quality Division is assuring that violations of air quality regulations are addressed and corrected in a timely manner.

Enforcement actions initiated by the Air Quality Division during FY 2001 resulted in a decrease of more than 1,300 tons per year (TPY) in total emissions from oil and natural gas processes alone. Initiating programs such as leak detection and repair (LDAR) and flare gas recovery projects were responsible for the reduction of 200 TPY of nitrogen oxides (NOx) and sulfur dioxide (SO2) combined, and 298 TPY of volatile organic compounds (VOC). The addition of the LDAR program at one facility reduced total fugitive emissions by 85 percent. Control equipment installation at other facilities reduced emissions of hazardous air pollutants (HAP) by 16.47 TPY, VOC by 146.29 TPY, and NOx by 44.34 TPY. Other reductions were the result of process changes and permit limitations.

Manufacturing facilities are another source category that has seen a decrease in total emissions as a result of Air Quality enforcement action. The use of solvents and solvent-based paints at these kinds of facilities presents the possibility of high levels of HAP and VOC emissions. HAP emissions were reduced by nearly 90 TPY through paint reformulation, emissions controls and process changes. One source completely eliminated styrene from product fabrication, resulting in a 27.95 TPY reduction of styrene emission. Another facility eliminated 9.35 TPY of styrene by changing a catalyst used in the manufacturing process. This modification resulted in a 50 percent drop in styrene emissions for that source. These reductions are of particular interest as styrene is listed as a category B toxic, meaning it is moderately toxic to humans. Paint reformulations resulted in 34.88 TPY fewer HAP emissions and 41.6 TPY fewer VOC emissions. A single company accomplished a 50

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percent reduction in VOC and HAP emissions as a result of changing from solvent-based to waterborne paint. Particulate emissions from several sandblasting facilities were reduced by over 50 TPY as a result of process changes. Total emissions reductions from manufacturing facilities amounted to 187 TPY due to air quality compliance/enforcement actions.

Combined, more than 1,500 TPY of air emissions were eliminated as a result of Air Quality enforcement during FY 2001. More than 88 percent of the reductions were from NO\textsubscript{x} and VOC, known contributors to ground level ozone formation. In addition to these quantitative reductions, Air Quality enforcement actions have required several facilities to apply for permits with enforceable emissions limitations this year. While these restrictions do not make quantifiable emissions reductions, they do limit the amount the facilities will be able to emit in the future.

Although a primary focus of enforcement actions is to bring the facility into compliance, formal enforcement proceedings frequently result in penalties being assessed against a company. These penalties are intended as a deterrent against future violations and to assure that the company does not profit as a result of the violations. The penalties usually include fines, but more importantly Supplemental Environmental Projects (SEPs) are often incorporated. SEPs have a two-fold purpose: one, they reduce the amount of the fine paid by the facility, and two, they involve some type of “extra” emission reduction or environmental improvement action by the facility. SEPs carried out this year have included process changes, addition of emission control equipment, community beautification and environmental education projects.