

ENVIRONMENTAL QUALITY REPORT

JANUARY 1, 2008

The Department of Environmental Quality (“DEQ”) is required by statute annually to submit an “Environmental Quality Report” to the Governor, the President Pro Tempore of the Senate and the Speaker of the House of Representatives, outlining the DEQ’s annual needs for providing the environmental services within its jurisdictional areas, any new federal mandates, and state statutory or constitutional changes recommended by the DEQ. The Report must be reviewed and approved by the Environmental Quality Board (“Board”) prior to its submittal to the Governor and Legislature.

I. ANNUAL NEEDS

Background

For FY09, the DEQ is requesting a state legislative appropriation of \$9,728,096 to address ongoing costs. In addition to that, the DEQ is requesting appropriated funds totaling \$4,090,000 for Oklahoma’s Energy Efficiency & Emissions Reduction Program (\$2.5 million), Small Community Assistance (\$60,000), Laboratory Equipment (\$500,000), Blue-Green Algae Monitoring and Outreach (\$370,000), Public Water Supply Assistance (\$400,000), Total Maximum Daily Load Development (\$200,000), and Drought/Flood Assistance (\$60,000).

Oklahoma Energy Efficiency & Emissions Reduction Program (\$2.5 million / 1 FTE)

Last year the Board approved DEQ’s moving forward with the Blue Skyways program. Although DEQ was unsuccessful in the last legislative session, we believe the idea is worth the effort of re-proposing for the next legislative session. Since there was some confusion as to the name and exactly what Blue Skyways was supposed to reference, the proposal for next session will be called “Oklahoma’s Energy Efficiency and Emission Reduction Program.” The request itself is identical to the one made last year. The purpose is to promote and enable public and private entities in their efforts to implement energy efficiency and emissions reduction programs in Oklahoma. These funds could also be used to support appropriate biofuel proposals. The DEQ is requesting \$2.5 million per year for four years which would be used as a DEQ match at the rate of 75% for private projects and 95% for public ones. We think the public health benefits and energy savings make the efficiency programs worthwhile to our citizens. These incentives may be used to entice early reduction programs that will help maintain attainment with the current ozone standard and with any new standard should one be adopted by EPA.

This proposal requests 1 FTE and \$2.5 million.

Small Community Assistance (\$60,000 / 1 FTE)

Over the past year, DEQ's Customer Services Division (CSD) has established a trial position designed to assist and encourage small communities to address water and wastewater problems. This portion of the budget request seeks funding and an FTE to make these activities a permanent part of our small community assistance activities.

This position is engaged in activities that provide assistance to small communities in Oklahoma in the areas of water and wastewater. The activities will be in four general areas. First, this person will assist a community step-by-step through the funding and permitting processes. This includes helping to initiate and facilitate discussions with persons that can provide technical or regulatory assistance, such as the Water Quality Division (WQD) permitting staff, Environmental Complaints and Local Services (ECLS) staff, District Engineers, grant and loan providers, and other appropriate parties.

Second, this position assists the community or system in understanding the different grants and loans that may be available.

Third, this position provides the above services to communities who wish to work proactively regarding their systems and their needs for the future.

Fourth, this position assists with situations of chronic non-compliance, acting as a liaison to make certain the community understands the need to comply with a compliance order and facilitating and encouraging discussions with permitting staff, funding agencies, etc.

This position also serves as a DEQ representative to groups and organizations that are focused on the needs and concerns of small communities and rural Oklahoma. This includes such groups as the Councils of Governments, Oklahoma Municipal League, the legislative Rural Caucus, Economic Development Districts, etc.

This proposal will require 1 FTE and \$60,000.

Laboratory Equipment (\$500,000)

The DEQ provides laboratory analysis for most of the small communities in Oklahoma and uses available federal and state revenues to keep these costs to a minimum. Small communities pay for these analyses through fees billed for services as received. DEQ also provides analytical services to the other Divisions of DEQ and to the Oklahoma Water Resources Board and bills these entities through a fee for service.

Small communities and other customers rely upon DEQ for this service, but the agency continues to struggle in two areas to fund the cost of equipment needed to provide this testing. In the past we have received one-time funding through federal grants or REAP, but what we really need is a continuing appropriation to allow the State Environmental Laboratory to replace existing equipment and purchase new equipment as technology develops and programs grow with new needs for analytical support. DEQ has a current investment in analytical testing equipment of more than \$3,750,000. Laboratory equipment has a useful life span of seven to ten years. New technologies that we currently can foresee include PWS testing for Cryptosporidium

and Giardia, which is expanding to include many more systems, and testing for human by-products in both stream and drinking water samples.

This proposal requests \$350,000 for equipment replacement and \$150,000 for new equipment.

Blue-Green Algae Monitoring and Outreach (\$370,000 / 2 FTEs)

In recent years Oklahoma has experienced drought conditions, as have our neighboring states. In Kansas one public water supply reservoir even had to be closed due to a severe bloom of blue-green algae and related toxin production. Blue-green algal toxins can affect the liver and nervous system of pets, livestock and potentially humans. EPA is considering adding monitoring of algal toxins to the drinking water standards. Oklahoma has many reservoirs that, during conditions of drought, are very susceptible to this type of blue-green algae bloom. DEQ wants to be proactive and develop capability to monitor for blue-green algae blooms and toxins as well as educate drinking water operators and reservoir managers on what to look for and how to respond to a bloom.

The first phase of our approach will be to review high-risk public water supplies and set up a pilot for monitoring the algal community, toxin presence, nutrient content and general chemistry of the reservoir. At that time we will also develop a survey of public water supplies that may be at risk for blue-green algae problems. As a first step, CSD will develop microscopic capability for blue-green algae identification. This step will require \$15,000 for equipment and supplies.

Phase two of the proposal will be to develop capability to use Enzyme Linked Immunosorbent Assay (ELISA) testing for identification and quantification of the most harmful blue-green algae species. In this phase we will use a contract laboratory for confirmation of ELISA testing. This step will require an additional \$15,000 for equipment and supplies.

In phase three we will develop in-house capability for identification and quantification of blue-green algae and toxins using Liquid Chromatography Mass Spectroscopy (LC/MS) technology. This will require \$200,000 for equipment purchase and six months to one year for method development.

Throughout the development and implementation of these testing capabilities CSD will also provide educational outreach to DEQ Public Water Supply (PWS) district engineers, ECLS field staff, water supply operators and lake managers. This will include training on what to look for during inspections and site visits; World Health Organization recommendations regarding blue-green algae and its hazards; recreational hazards posed by blooms; health and safety exposure hazards; treatment of blue-green algae blooms; posting reservoirs that are experiencing a bloom; and developing a self-monitoring program. CSD will provide meetings for water operators and lake managers and develop a central reporting system for problems.

This proposal will require 2 new FTEs, \$130,000 for personnel costs and \$10,000 annually for supplies. Equipment costs will be \$15,000 for the first phase, \$15,000 for the second phase and \$200,000 for the last phase. Program development will occur over a two-year period. The total cost for this request is \$370,000.

Public Water Supply (PWS) Assistance (\$400,000 / 6 FTEs)

DEQ recognizes that the regulated community in general and small community systems in particular face a difficult task in attempting to comply with the large number of new federal rules that have been implemented over the last few years. Due to the complexity of the new rules, it is critical that DEQ continue its efforts to provide technical support to communities.

While DEQ has made every effort to continue to provide a high level of support to the regulated community, it has become increasingly difficult to provide this service due to resource limitations. This last fiscal year, the lack of federal funding left DEQ no choice but to seek alternative funding sources in order to continue efforts to provide the amount of assistance that was needed to ensure compliance with PWS requirements.

When approached with this issue, state legislators recognized the significant burden that has been placed upon those having to implement the new federal rules. In an effort to reduce that burden and to ensure that the necessary assistance is provided to those that need it most, state legislators appropriated funding for DEQ to provide additional assistance to smaller communities.

DEQ utilized these funds to pursue the “Small Community Assistance Initiative,” expanding efforts to provide technical assistance to those Public Water Supply (PWS) systems struggling with compliance issues. This effort was implemented in a manner which complemented the “My Facility” approach to providing services to our customers. As a result of this new initiative, DEQ significantly increased the amount of technical assistance provided to small PWS systems in FY07:

- DEQ increased the number of technical assistance site visits to small systems by 51% (414 visits).
- DEQ increased training opportunities, providing formal training to 318 small PWS systems on the implementation of new PWS rules.
- DEQ teamed with EPA to provide training, specifically dealing with Stage 2 Disinfection By-Products, to 210 small PWS systems.

To date, increased efforts under the “Small Community Assistance Initiative” have resulted in modest increases in the number of systems maintaining compliance; however, there is much left to be done. For smaller systems, developing the capabilities to ensure compliance with new rules will be a long-term process. To ensure that smaller systems continue to improve on compliance it is critical that DEQ not only continue current efforts but further expand those efforts to provide additional technical support.

These additional funds will allow DEQ to expand efforts to provide assistance and evaluate the success of those efforts to:

- Identify the rules with which communities are having difficulty complying
- Identify those small communities having significant compliance issues
- Increase technical support site visits to those identified communities
- Provide additional training opportunities to all systems targeting those rules with which systems are having the most trouble

- Track efforts to ensure assistance is being provided to those most in need
- Document how successful efforts were in increasing compliance rates

We estimate that a minimum of \$400,000 per year increase in revenues will be needed to fund increased demands on PWS staff created by the new federal PWS rules. This increase would cover personnel costs of 6 FTEs required to implement new rule requirements and to provide additional technical assistance to those systems impacted by new rules.

Total Maximum Daily Load (TMDL) Development (\$200,000)

The DEQ is also attempting to address new and expanded Total Maximum Daily Load (TMDL) requirements under the federal Clean Water Act. A TMDL is the process of calculating the quantity of a particular contaminant that a specific water body can receive and still meet Oklahoma Water Quality Standards (WQS). In Oklahoma there are currently more than 600 waterbodies identified as being impaired by pollutants; TMDL development is required for each of these impaired waterbodies. These TMDLs will need to be completed over the next few years under a federally mandated schedule. EPA is asking DEQ to complete 93 TMDLs in 2008.

While DEQ must comply with the federal rule, there are other issues that need to be taken into consideration as well. DEQ recognizes the need to prioritize TMDL efforts in a manner that provides benefits to those in the regulated community. There are currently more than 100 PWS systems drawing water from impaired waters, both from lakes and streams. In looking at compliance issues associated with these systems, many have violations associated with disinfection by-products, the result of the interaction between chlorine used for disinfecting drinking water and the organics in the raw source water. TMDLs can help identify sources of contaminants that may be contributing to these problems. Once identified, federally funded programs such as the 319 Program can implement Best Management Practices to help control potential non-point sources. As contaminant sources are identified and steps taken to address those issues, it can only help those communities struggling to treat impacted water supplies, resulting in a reduction in operational costs and making it easier to comply with federal requirements.

The ability to supply safe and dependable drinking water to its citizens and industries is a fundamental necessity for Oklahoma towns and cities. For small communities it can be the difference between having a sound economy or not. DEQ proposes to prioritize TMDL efforts to maximize the benefit to small PWS systems. Under this prioritized schedule DEQ proposes to perform TMDLs on PWS supply lakes supplying water to significant numbers of small communities in FY08. As TMDL development is a very resource-demanding process, to meet this obligation will require a significant increase in the resources devoted to this effort.

DEQ estimates that an additional \$200,000 in resources will be required to meet the federally mandated TMDL commitment. This increase would cover costs associated with modeling efforts required to generate TMDLs.

Drought / Flood Assistance (\$60,000 / 1 FTE)

Over the last few years we have seen both severe drought conditions and flooding on a state-wide scale. Both of these extremes have had a significant impact on water and wastewater systems throughout the state. DEQ had to devote significant resources to providing assistance to impacted systems, helping them to respond to emergency situations, allowing them to continue to provide safe sources of drinking water and prevent negative impacts associated with improperly managed wastewater.

While DEQ will always make every effort to help communities respond to these types of situations, it has become increasingly difficult to devote sufficient resources to provide the level of support that is necessary. An increase is needed to cover personnel costs (1 FTE) to coordinate with water and wastewater systems to identify those systems that are anticipating or are having problems and working with them to identify solutions. The goal would be to identify and address potential problems before a system loses water or wastewater capabilities.

This proposal will require 1 FTE and \$60,000.

FTE Needs Summary (17 Total FTEs)

The above funding requests include FTEs that account for 11 of 17 FTEs the agency is requesting. The remaining 6 FTEs are described below.

Air Quality Division – 3 FTEs

We also request 3 replacement FTEs for the Air Quality Division. Three engineering FTEs were transferred to other divisions to help fill agency priorities. We anticipate needing to replace these FTEs to address likely changes to the ozone standard as well as technical needs that will probably arise in our toxics program. Specifically, we have decided to continue to develop our internal expertise in modeling, building on our experience gained as part of the regional planning work associated with the regional haze program. EPA probably will not fund this activity in future years.

Environmental Complaints and Local Services (ECLS) – 1 FTE

ECLS has been forced to overextend staff to provide coverage to Muskogee County. Even without Muskogee County, the Tulsa DEQ office, which has a staff of six, covers all or parts of six counties with a workload demand of 6.8 FTEs. Despite already being stretched, the Tulsa office had to take on coverage of Muskogee County, working requested services, complaints and emergency response. Tulsa is a significant distance from Muskogee County municipalities (50 miles from Muskogee, 65 miles from Braggs, 69 miles from Warner, 77 miles from Webbers Falls and 79 miles from Porum). Covering Muskogee County permanently from the Tulsa office would limit the effectiveness of staff to provide services to Muskogee County and perhaps undermine service to all the counties serviced by the Tulsa office.

We request 1 FTE for ECLS, dedicated for Muskogee County.

Administrative Services Division – 1 FTE

As FTE levels increase in the various programs, there are some basic demands on ASD that also result in the need for additional FTEs. For example, an increase in permit writers and enforcement staff due to expanding federal programs results in:

- additional workload for Central Records;
- additional invoicing for accountants;
- additional IT-Operations support;
- additional IT-Telecommunications support;
- additional travel claims to audit and process; and
- additional human resources (OPM forms, benefits, and payroll) activities.

The agency has also been aggressive in utilizing existing and new technology to meet our program needs with new and modified data programs. These programs require maintenance after implementation, thus adding to the ASD responsibilities without additional FTEs.

ASD is requesting 1 additional FTE to meet this need.

Customer Services Division – 1 FTE

In FY08 DEQ has proposed a fee increase for the Laboratory Accreditation Program. This program is designed to assure that data supporting environmental programs and decision-making comes from laboratories that are organized, equipped and staffed to produce data of known and documented quality. The laboratory accreditation fees have not been increased in more than 14 years, and we have reduced staffing to only one inspector during this time. We accredit more than 170 laboratories both in Oklahoma and in other states. Each must be inspected at least once every two years. The new fees will provide funding to restore a second inspector to this vital program.

This proposal will require allocation of 1 FTE with funding to be provided by fees.

CONCLUSION

Appropriated funds are necessary if the DEQ is to address the variety of needs facing the agency. The requested funds represent only the most important or urgent needs DEQ has identified for FY09. We believe they merit very serious consideration.

* Next page, Table 1: Summary of Funding Needs

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Description	Funding	FTE
Energy Efficiency & Emissions Reduction Program	\$ 2,500,000	1
Small Community Assistance	\$ 60,000	1
Laboratory Equipment	\$ 500,000	
Blue-Green Algae Monitoring and Outreach	\$ 370,000	2
Public Water Supply (PWS) Assistance	\$ 400,000	6
Total Maximum Daily Load (TMDL) Development	\$ 200,000	
Drought / Flood Assistance	\$ 60,000	1
AQD - New Ozone Standard		3
ASD – Administrative Support		1
CSD – Lab Accreditation Program		1
ECLS – FTE Muskogee County		1
Total	\$4,090,000	17

II. FEDERAL MANDATES

AIR QUALITY DIVISION

There are several things that could happen during the next calendar year on the federal level that will directly impact the Air Quality Division and the sources we regulate. Primary among these will be the possible lowering of the National Ambient Air Quality Standard (NAAQS) for ozone as well as anticipated federal legislation with regard to climate change.

Ozone NAAQS Proposal

The ozone NAAQS proposal will be published in the middle of March 2008. Assuming no court challenge, the rule would become effective 60 days after publication in the Federal Register or approximately in June of 2008, with state designation recommendations due in June 2009 based on monitoring data for 2006-2008. While the EPA Administrator could recommend retaining the current standard of 0.08, it is widely believed something lower than that will be recommended. Anything lower than the current standard could result in large areas of Oklahoma being designated as non-attainment for the ozone standard in the coming years. Depending on what is recommended, DEQ will start to look at our current emission inventories as well as working with EPA in hopes of addressing issues we believe could unfairly impact our state as part of any designation process. These issues would include transport of pollutants from out-of-state sources and the impact on rural areas of the state.

Climate Change

Climate change is also an area that the federal government could act on in the coming year, although with the coming presidential elections this may wait until 2009. There are a number of bills that would regulate carbon to some degree. Due to a Supreme Court decision stating that EPA could not consider CO₂ a pollutant it didn't regulate, EPA will be deciding whether to grant California's requested waiver which would require cars sold in California in model year 2009 to meet state greenhouse gas emissions standards. If granted, this could have nationwide implications. There is recent speculation that in light of the Supreme Court decision, EPA may elect to regulate CO₂ as a criteria pollutant as well. Oklahoma has recently joined the Climate Registry, a policy-neutral organization designed to facilitate the accurate and consistent collection of greenhouse gas emissions. The Registry now has 39 states as members along with Canadian provinces, Mexican states, and Native American tribes. We believe this may be the tracking and verification platform EPA uses to begin implementation of any federal carbon program. We will continue to monitor and participate as appropriate in the ongoing activities of this Registry.

WATER QUALITY DIVISION

Wet Weather Policies (policy in lieu of rules)

The DEQ is faced with many new federal mandates, both by rule and policy. Some of the most significant (resource-intensive) mandates concern three new EPA policies; ICIS-NPDES, Wet Weather Significant Non-Compliance, and the Compliance Inspection Frequency policies. These policies impact National Pollutant Discharge Elimination System (NPDES) programs, significantly increasing reporting and inspection requirements with no additional funding being made available.

Over the last two years states have expended a great deal of effort to evaluate the impact implementation of these new policies will have on state resources, and it is significant. As a result of DEQ's evaluation effort, it was determined that to fully implement these policies would

require up to 19 additional FTEs, at a cost approaching \$1.5 million dollars annually. Despite state objections, EPA has indicated they will be phasing these policies in over the next two years.

When states expressed concerns over the resources that would be required to implement these new policies, it was suggested that fee increases might be the solution. It appears that efforts are underway at the federal level to move states toward 100% fee-supported NPDES programs. To promote this concept, the Office of Management and Budget (OMB) has directed EPA to adopt rules that will force states toward fee-funded programs. In support of this directive, EPA is pursuing an incentive program to provide benefit to those states funding NPDES activities primarily with fees. Under this program, Section 106 grant funds will be utilized to provide additional funding to those states that fund a significant portion of their NPDES programs through fees.

While Oklahoma does receive Section 106 grant funding to support NPDES activities, the amount of funding has not kept pace with the significant workload increases resulting from new federal requirements. As a result, the state has had to supplement federal funding with state appropriations and Oklahoma Pollutant Discharge Elimination System (OPDES) fees. The DEQ has attempted to buffer the financial impact of fees on the regulated community; however, it is becoming increasingly difficult as federal requirements continue to expand.

Public Water Supply Rules

There are several new federal Public Water Supply (PWS) rules, that have gone or will shortly be going into effect, which will require significant resources to implement: Stage 2 Disinfection By-Product Rule (Stage 2 DBP), Long-Term 2 Enhanced Surface Water Treatment Rule (LT2), and the Groundwater Rule. The DEQ has estimated that at a minimum 6 additional FTEs would be required to initially implement these rules. As the resources necessary to implement these rules are not available, DEQ has chosen not to seek delegation for administration of these programs, leaving that responsibility with EPA.

- The Stage 2 DBP Rule, which became effective January 2006, expands on the Stage 1 DBP Rule requiring compliance from additional systems (small PWS systems) and further tightening DBP limits and reporting requirements. The rule will be phased in through 2013.
- The Long-Term 2 Enhanced Surface Water Treatment Rule (LT2) rule, which became effective in October of 2006, will mandate additional microbiological parameters (bacteria, virus, etc.) for compliance monitoring for all drinking water systems. The rule will be phased in through 2008.
- The Ground Water Rule, which is expected to become effective within the next year, will require all ground water systems to evaluate their vulnerability to potential sources of fecal/viral contamination. Based on the results of evaluation systems will to enhance monitoring and treatment accordingly to address any identified contaminants.

While state needs may best be served by Oklahoma administering these PWS programs, the required resources to do so simply are not available. As federal requirements continue to expand, resource limitations will continue to be an issue.

III. DEQ LEGISLATIVE RECOMMENDATIONS

The following are DEQ's proposals, as of the date of preparation of this Report and subject to concurrence by the Environmental Quality Board, for request legislation for the 2008 regular legislative session.

Oklahoma Energy Efficiency & Emission Reduction Program

The DEQ proposes enabling legislation to allow for use of the money requested as part of the 2009 budget.

The purpose of this legislative recommendation is to help control and reduce air pollution in Oklahoma by providing funds for matching grants to encourage governmental and nongovernmental entities to take voluntary measures to increase energy efficiency and reduce harmful air emissions.

Radioactive Waste Compact Commission Fees

Oklahoma is a member of the Central Interstate Low-Level Radioactive Waste Compact Commission. The fee from the state to Compact Commission in any given year is assessed only against the generators who actually dispose of low-level radioactive waste within that year. This means that in some years the entire fee is borne by a single generator, while in other years it is shared among several generators. This can result in a disproportionate impact on one or two generators.

The purpose of this proposed legislation would be to allow Oklahoma's share of funding for the Compact Commission to be paid out of other state radiation program funds, if available, rather than collecting a variable fee from a limited number of state businesses.