



Nebraska Department of Environmental Quality

# ENVIRONMENTAL *Update*

Winter 2004/2005

## 2004 Marks New Era in Toxic Algae Awareness

Although toxic blue-green algae has always been a potential threat to public health, it became an issue of much greater concern in Nebraska in 2004.

The state's awareness of the issue became sharply focused in early May, when the Department of Environmental Quality (DEQ) received reports of a dog dying after drinking water containing algae from Buccaneer Bay, a residential sandpit lake near the Platte River, south of Omaha. The autopsy conducted on the dog and water samples taken from the lake both confirmed high levels of the algae toxin Microcystin.

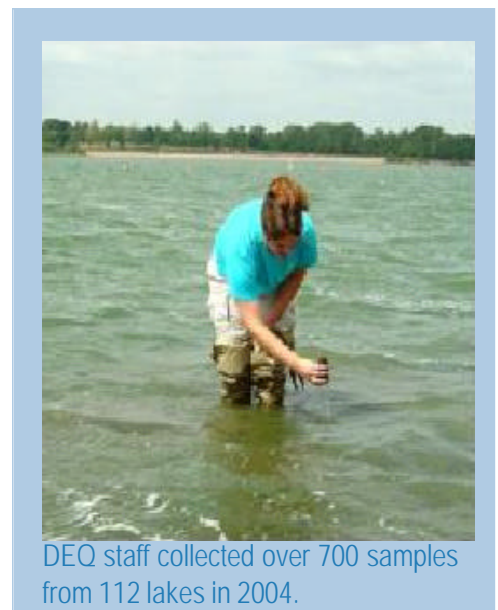
This toxin is found within certain strains of cyanobacteria (cyanobacteria is commonly referred to as blue-green algae, although technically it is not a true algae). During this same time frame, DEQ received reports from a few other lakes near Buccaneer Bay, regarding sick animals and the presence of large algae blooms.

### State's Initial Response

Staff from DEQ met with officials from Nebraska Health and Human Services, Nebraska Game and Parks Commission and the University of Nebraska Cooperative Extension to develop an immediate strategy to define the problem and warn the public of potential hazards. The state immediately contacted the media and local health officials to inform the public that there was a potential health threat at the lakes where initial problems were discovered. DEQ purchased lab testing equipment to more quickly determine the amount of toxins present in Nebraska's lakes. The three agencies also developed a protocol to determine when and where to conduct sampling. They established a weekly sampling schedule at those locations that were determined to be high priorities. During the outdoor recreation season and throughout the fall, samples were taken every Monday, and results made public by Friday of the same week.

In addition, the University of Nebraska Cooperative Extension provides sampling kits for individuals who wanted to test their own lakes, at sites that were not ranked as priority sites by the state. Individuals who receive the kits collect their own samples and send them to the University. The University provides an analysis of the types and densities of blue-green algae present in the samples. Those samples with dense concentrations of blue-green algae are then sent to DEQ's Biolab to test for the levels of Microcystin toxins. (For more information on this program, contact the University at 402-472-7783 or 3305).

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DEQ staff collected over 700 samples from 112 lakes in 2004.



Mike Linder

# A Message From The Director

## Lessons Learned From a Natural Disaster

When a disaster strikes, such as the tornadoes that struck Hallam and several other areas in eastern Nebraska in the spring of 2004, there needs to be coordinated efforts between the public, local responders and multiple state and federal agencies. It is a monumental undertaking to try to bring order in a situation where nature has caused such unexpected chaos and destruction.

These unfortunate events were a testing ground for the plans and exercises that the state has been pursuing to respond to natural disasters and terrorist events. Although the Department of Environmental Quality (DEQ) is not the central agency in these types of emergency responses, we did provide some assistance in the state's efforts. And, from our vantage point, it is clear that the state's disaster response plans and exercises are yielding positive results.

The state agencies that typically have the greatest state involvement in emergency response are the Nebraska

Emergency Management Agency (NEMA) and the Nebraska State Patrol. However, the DEQ and several other state agencies can also be involved in the long-term response in these types of disasters. In the case of the spring tornadoes, the DEQ's role focused on the proper disposal of debris and animal carcasses, and to also provide staffing assistance at NEMA offices and at the sites of the damage. Several DEQ employees, including our Deputy Director of Programs, provided assistance to NEMA for over a month following the tornadoes.

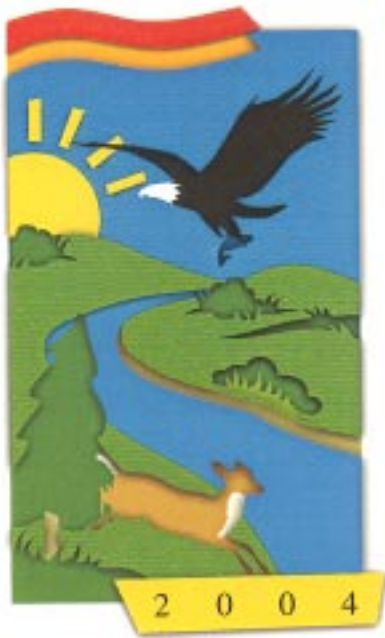
Of course, the lead responsibility in these types of situations typically falls on the shoulders of local responders, with state and federal agencies lending assistance as needed. But in this particular case, we also had a couple of DEQ employees who played key roles in the local response. Patrick O'Brien and Derek Schreiter are both program specialists with DEQ. Both live near Hallam and are volunteers with the local fire and rescue department. Pat was on-scene immediately following the disaster, and was designated to serve as the Incident Commander. In that position, Pat was in charge of the local response, and played a pivotal role in coordinating state and federal assistance. Derek also was quickly on the scene, and provided extensive assistance in the rescue and recovery efforts.

Pat's and Derek's dedicated, extensive involvement in these efforts, and the

leadership they exhibited during this challenging situation are truly commendable. Everyone involved did a great job throughout this extended response to a natural disaster. Even so, we were all making mental notes throughout the response, evaluating how well efforts were coordinated, and how we could improve responses in future emergency situations.

When you see the devastation that occurred in southeast Nebraska, it may be hard to find any "silver linings." However, there are some positive aspects that can be taken from this tragedy. First and foremost is the fact that there were few residents who were seriously injured or killed from the tornadoes. Considering the devastation, this says a great deal about how well people responded and took shelter. Second, it did demonstrate that local, state and federal responders can react in a coordinated, efficient way when disaster strikes. And third, it gave these agencies a real case-in-point to learn from, so that we can improve our response efforts in the future.

# POWER SUMMIT



On November 4, a four-year-old partnership between the Department of Environmental Quality (DEQ) and Nebraska Public Power District (NPPD) entered a new phase as the two organizations for the first time brought representatives of the electrical generation sector together with department staff in a day-long “summit.” The meeting is the latest result of an agreement signed by both organizations in 2000, according to Joe Francis, DEQ Associate Program Director.

“In August of 2000 NPPD and DEQ entered into an environmental partnership with the intent to maximize each organization’s resources in the quest for mutually desirable goals,” Francis said. “Simply stated, the overall goal is to provide Nebraskans with a sustainable place to live. Under the partnership several projects have been initiated, the latest being the Power Summit.”

The summit provided the opportunity for personnel from DEQ and the power generating industry to discuss and exchange information about specific regulatory issues related to power production, programs, and issues. In addition, climate change entered the discussion thanks to a presentation by Michael Cummings of Pew Center Business Solutions. Gary Lynne from the University of Nebraska – Lincoln spoke on greenhouse gas and allowance trading, and NPPD and the Omaha Public Power District combined to provide information about alternate energy initiatives.

“Providing the opportunity for increased dialogue and communication was one purpose of the summit,” said Melissa Woolf, Environmental Assistance Coordinator for the Air Quality Program. “We wanted to bring people together to examine issues of common interest in a setting that stimulated conversation of a type that we often don’t take time for – all in all, I think we accomplished exactly that.”

Article by Rich Webster

## Air Program Workshops Provide 2004 Update

The Air Quality Division held “Air Program Update” workshops in the fall of 2004 in Kearney, Scottsbluff, Lincoln, and Norfolk to present information regarding Nebraska’s air quality regulations. The workshop agenda for this annual event included information on state and federal air regulation updates, emission factors, emission calculations, air quality compliance, and asthma in the workplace.

The 2004 Air Program Update workshops were among the most successful workshops the Air Quality program has held in recent years. 2004 attendance was up 27% compared to the 2003 workshops. In addition, evaluations filled out by workshop participants indicated that 97 percent left with a better understanding of the DEQ Air Quality program, and 98 percent would attend another Air Program Update workshop.

The workshops were sponsored by: Air Resource Specialists, HDR, Inc., and the Institute for Environmental Assessment. DEQ thanks the consultants who furnished refreshments at each location.



### Health Alert System

The three state agencies also developed a Health Alert system for those lakes that had toxins at a level that is considered a potential health risk. At sites where samples of the toxin Microcystin are measured at or above 15 parts per billion, a Health Alert is issued. When a Health Alert is in effect, the public is prohibited from full-body contact activities, such as swimming, water skiing, jet skiing, sailboarding and tubing. However, recreational boating and fishing are permitted in those areas, as long as the public avoids situations that could possibly involve the ingestion of water. People can still use the areas for camping, picnics, and other outdoor activities.

The state also urges the public to pay particular attention to small children and pets, and prevent them from having contact with the water in those areas where a Health Alert has been issued.

### Numerous Lakes Placed on Alert

Over the 2004 recreational season, which extended from May 1 through September 30, Health Alerts were issued at 24 lakes in Nebraska. Some alerts were issued for only one week, because readings taken the following week indicated that toxin levels had subsided. However, at some of the lakes, the problems persisted or recurred. Five lakes were on alert status for six weeks or longer.

Because this is the first year that detailed data has been collected on toxin levels in Nebraska's lakes, the state does not have definitive evidence that the levels were higher than previous years. However, anecdotal evidence suggests that an unusual toxic algae problem existed in 2004. In addition to the reports of dog deaths in May, the state received numerous calls from people becoming ill at Pawnee Lake near Lincoln in mid-July. The calls were from people who had been swimming in the lake less than a week before a Health Alert was issued there. Altogether, about 50 cases were reported to the Nebraska Health and Human Services System of individuals who experienced skin rashes, nausea and other gastrointestinal disorders after reportedly being immersed in or swallowing lake water. Toxin levels at Pawnee Lake continued to be high throughout the entire recreational season.

“The number of calls we received reinforced what we were already telling the public – this can be a real threat to public health, and needs to be taken seriously,” said Dr. Tom Safranek, state epidemiologist. “Simply put, if there’s a sign posted saying that a lake is under a Health Alert for toxic algae, people need to stay out of the water.”



### Causes, Cures and Predictions

Many questions were raised by the many Health Alerts issued in 2004, such as: What causes toxic algae? Why does it seem worse this year? What can be done to stop or prevent it? Will it continue to be a significant problem in future years?

The answers to these questions are not simple, and state and University officials, as well as their counterparts in other states and the federal government, are seriously examining these issues.

Many strains of green and blue-green algae occur naturally in Nebraska's lakes. The right combinations of sunlight, temperature, low water levels, and nutrients in the water are believed to allow certain strains to dominate at various times. There can also be man-made contributions to the problem – the nutrient levels in the water can be affected by runoff that contains fertilizers, or seepage from septic systems, for example. It is likely that the right combination of environmental conditions in 2004 caused some of the toxic strains of blue-green algae to be more dominant than normal at some Nebraska lakes.

In order to reduce the occurrence of blue-green algae blooms, the first line of defense is identifying and curtailing any man-made contributions to the problem, said John Lund, Supervisor of DEQ's Surface Water Unit. The University of Nebraska Cooperative Extension has been

“Simply put, if there’s a sign posted saying that a lake is under a Health Alert for toxic algae, people need to stay out of the water.”

---Dr. Tom Safranek,  
State Epidemiologist

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# Grant Funds Help US GreenFiber Purchase New Grinder for Recycling

On September 29, 2004, representatives of US GreenFiber in Norfolk held an open house, giving a chance to many interested parties to see a new recycling process. The company demonstrated a new rotary grinder that was purchased with grant money awarded by both Nebraska and Iowa grant programs.

Steve Danahy, Nebraska Department of Environmental Quality Planning & Aid Unit Supervisor said, “With this additional piece of equipment purchased through the Litter Reduction and Recycling Grant Program, US Greenfiber will be able to recycle additional types of waste that previously would have gone to a landfill.” Recycling materials like books and hard cardboard is now possible using the new grinder. It is large enough to

grind up totes of phonebooks whereas the grinder previously used by GreenFiber could grind just one phonebook at a time. The new process is more efficient and easier.

The process uses four grinders. By the time the paper has gone through all of the grinders (or fiberizers) it has the consistency of dryer lint. The paper, now called fiber, is treated with ammonia sulfate and boric acid to decrease the likelihood of the product catching fire. The product is then ready to be packaged into compressed blocks of fiber that will be used for insulation in homes and other buildings.

Some examples of paper material that US GreenFiber can recycle are: phonebooks; newspaper; cardboard

cores; car filters (with plastic removed); industrial cardboard egg cartons; magazines; blueprints; textbooks; cereal boxes; junk mail; paper towels; tissue; detergent cartons; and office, computer, and copier paper. These materials are used to manufacture from 3,000 to 5,000 tons of insulation per month.

“It’s always a challenge for any community to attract new businesses and keep existing ones,” said Danahy. “US Greenfiber has indicated that this grant, as well as the support of the community of Norfolk and the surrounding area, has helped make it possible for them to remain in the Norfolk area.”

The Norfolk facility has been recycling for almost two decades, previously under the name Green Stone.



**Above:** Bundles of paper and cardboard ready for recycling.

**Right:** The product is compressed into blocks of insulation. Before it can be blown into an attic or other area, it will need to go through a process that will ‘fluff-up’ the insulation.

Article and Photos by Amy Callahan

## Toxic Algae, continued from page 4

working with DEQ to define these potential contributors to lake problems, and to work with communities to find solutions.

In addition to reducing man's contribution to the problem, state and university officials are also examining various treatment options. Although there are chemical treatment options that can reduce algae growth, those options are not necessarily practical if a lake is experiencing an algae bloom, Lund said. The chemicals can effectively kill algae, but when the algae dies, it releases the toxins into the water. In other words, treatment has the potential of causing a sudden increase in toxins in a lake, if the treatment takes place when there is already a large algal bloom. The use of chemical treatment as a method of prevention (conducted prior to the usual season for algal blooms) is still being discussed.

The general consensus of those involved at state and local levels is that the most important component of the solution is reducing the amount of surface runoff and nearby seepage that affect the nutrient levels in lakes. Runoff problems can occur from over-fertilization of yards and farm fields. Seepage problems can occur if there are improperly designed septic systems nearby or other activities that can cause organic contaminants to travel through the ground water aquifer into the lake. These runoff and seepage factors not only contribute to algae problems, but also degrade the overall quality of Nebraska's surface waters, and need to be minimized.

### Reflecting Back, and Looking to the Future

DEQ Director Mike Linder had a positive evaluation of the overall organization and responsiveness of those involved at the state and local level.

"The situation over the past year was unusual, and we had to quickly respond to this unexpected new concern," Linder said. "The response within our agency and elsewhere was exceptional. We received great cooperation from the other state agencies, University Extension, local health agencies, NRDs, and the State of Iowa, just to name a few of the groups we have worked with. The media was also very helpful in



## Contact with blue-green algae can make you sick.

Blue-green algae blooms sometimes smell bad and can look like thick paint spilled in the water. If you visit a lake that looks like it may have a problem, there are several methods of protecting yourself and others from the hazards.

- ▶ **Avoid** contact with the mats of blue-green algae.
- ▶ **Never** allow children or pets to play in or drink scummy water.
- ▶ **Do Not** water ski or jet ski over algae mats.
- ▶ **Do Not** use scummy water for cleaning or irrigation.
- ▶ If you come into contact with the toxic algae, wash thoroughly, paying special attention to the swimsuit area. Thoroughly wash the fur on pets that come into contact with the algae.

If you experience health symptoms, notify your physician, and also report it to the Nebraska Health and Human Services System at (402) 471-2937 or the Poison Information Hotline at (888) 232-8635.

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# EPA Administrator Leavitt Tours Omaha Lead Superfund Site

A beautiful early fall day set a perfect stage for a brief but informative stop in Omaha by Environmental Protection Agency (EPA) Administrator Mike Leavitt.\* Administrator Leavitt toured a portion of the Omaha Lead Superfund site on October 5 accompanied by EPA Region 7 Administrator Jim Gulliford, 2<sup>nd</sup> District Congressman Lee Terry, Governor Mike Johanns\*, and Omaha Mayor Mike Fahey.

Soil at over 20,000 residential properties, schools, and child care facilities in and near Omaha have been tested since 1999 for soil lead concentration. At about 40 % of these properties, mostly in a 20 square mile area near downtown Omaha, soil has been found contaminated with lead at levels high enough to qualify for removal under the Superfund program. Lead contamination resulted from emissions from lead smelting operations formerly operating in east Omaha.

Article and Photos by Rich Webster



A cleanup in progress at 2025 Lake Street. Soil at this location was contaminated with up to 1640 parts per million (ppm), far above the lead cleanup action level of 400 ppm.

EPA Administrator Mike Leavitt and an employee of Environmental Restoration, the cleanup contractor, discuss the results of a soil sample taken from 2025 Lake Street.



Three students from nearby Lothrop Magnet Center share their thoughts about the Omaha Lead Superfund site cleanup with four participants. The students were speaking in the yard at 2222 Pinkney Street, site of a day care facility where lead cleanup has been completed. Enjoying the presentation are, from left, EPA Administrator Mike Leavitt, Congressman Lee Terry, and Governor Mike Johanns.

\* Mike Leavitt resigned as EPA Administrator in late January 2005, to become Secretary of the U.S. Department of Health and Human Services. Mike Johanns resigned as Governor January 20, 2005 to become Secretary of the U.S. Department of Agriculture.

# Variance Approved For Ash Grove Cement Company

In July 2004, the Department of Environmental Quality (DEQ) approved a variance which will allow the Ash Grove Cement Co. to burn tires in addition to coal at its Louisville cement kiln over a 60-day period. (A variance is usually a limited and temporary suspension of a rule.)

Ash Grove normally burns coal for fuel in the cement-making process. The purpose of the proposed tire burning, or “trial burn,” is to conduct a series of performance tests to determine the feasibility of burning tires as fuel. In the trial burn, varying percentages of tires will be added to coal to determine the most effective fuel mixture.

Ash Grove will be required to comply with all emission limits established in its air quality operating permit during the trial burn. DEQ is requiring the company to test for the presence of, and determine the quantity of, specific hazardous air pollutants, including metals.

DEQ received Ash Grove’s variance request in May 2003. The request was revised by Ash Grove in February 2004. Ash Grove requested permission to install equipment for feeding and burning whole tires in the facility’s ACL and Humboldt kilns.

In February and May 2004 DEQ held public informational meetings in Louisville to discuss the Ash Grove trial burn. DEQ staff provided information about the trial burn process and related air quality issues to approximately 175 people. Answers to the many questions raised at the two

meetings were compiled and posted on the department’s web site.

If Ash Grove decides to burn tires as fuel on a permanent basis, the company will be required to request a modification to its operating permit. DEQ would conduct an extensive review and analysis of Ash Grove’s permit modification application. Following the department’s preliminary decision to approve or deny the application, DEQ would accept public comments on its draft permit decision for at least 30 days. During the comment period, the public would have the opportunity to request a hearing on the Ash Grove proposal.

“Overall, the information I have reviewed tends to indicate that tires can be used as fuel in an environmentally sound manner,” DEQ Director Mike Linder said. “With the proper restrictions in place, the 60-day trial burn would give us actual facility information to determine whether that is true of tires used at the Ash Grove facility.”

DEQ has contacted other states regarding the use of tires as fuel and found that there are 25 states with cement kilns permitted to burn tires. Information about some of these kilns is posted on the DEQ website.

As of mid-February 2005 Ash Grove had not set a date to start the 60-day trial burn. When the trial burn is conducted, DEQ will provide a schedule of planned test burns, and will post the results on its website: [www.deq.state.ne.us](http://www.deq.state.ne.us).

## What is a cement kiln?

A typical cement kiln is a huge cylindrical furnace 12 to 25 feet in diameter and 450 to 1,000 feet in length. Kilns are set on a slight incline and rotate from one to three revolutions per minute. Cement kilns can process up to 200 tons of raw materials such as limestone, clay, and sand per hour.

The temperature inside the kiln can exceed 2,700°F. To reach this high temperature a large amount of fuel is needed. Twelve tons of fuel can be burned in an hour. The raw materials move through the kiln until a chemical reaction occurs, and a new compound called “clinker” is formed. The clinker is then cooled and mixed with gypsum. The gypsum and clinker are ground into a powder that becomes cement.

The intense heat of the combustion process separates the fuel into organic and inorganic components. The organics are consumed as fuel and the various inorganic compounds either become part of the cement product or are collected in air pollution control devices.

The most commonly used kiln fuels are coal, natural gas, and oil. In recent years many states have allowed tires to be used as fuel in cement kilns.



# VCP Encourages Faster Cleanups, Redevelopment Of Contaminated Properties

The Nebraska Voluntary Cleanup Program (VCP), formerly known as the Remedial Action Plan Monitoring Act or RAPMA, was established by the Nebraska Legislature in 1995 . Recently revised and given a new name, this streamlined, results-based program is designed to promote the voluntary cleanup of contaminated properties. By encouraging voluntary action, the VCP may lead to beneficial reuse and economic redevelopment of property that may otherwise be regarded as a liability.

The VCP approach minimizes the number of steps in the regulatory review process and focuses on goals or objectives rather than a rigid and structured process. The individual, company, or municipality desiring to clean up a property takes a more independent role in conducting a thorough investigation, defining the problem, and developing a plan for cleaning up the contamination. The DEQ's role in this revised, fee-based approach to cleanups focuses on review, oversight and approval.

The streamlined approach of the VCP does not mean that investigation and cleanups are less effective than they would be under a more traditional remediation approach. All work completed under a VCP agreement must conform to federal and state environmental laws and regulations. DEQ ensures that the VCP process continues to protect human health and the environment, and ensures that cleanup goals are within the acceptable risk range of federal cleanup programs. Any property owner, prospective buyer, developer, lending institution, or other entity may apply to the VCP to clean up land or water pollution.

DEQ expects the VCP to:

- Reduce health-related risks associated with contaminated property;
- Facilitate faster cleanups;
- Encourage redevelopment of property;
- Lessen urban sprawl by promoting the reuse of commercial and industrial property; and
- Conserve tax dollars and limited government resources.

Recent changes to the VCP are intended to make it compatible with Federal criteria. If Nebraska's VCP is approved by the Environmental Protection Agency (EPA), continued funding for Nebraska cleanup projects may be available through the Federal Brownfields Act. Revised VCP guidance will be finalized in March 2005 and will be available on the DEQ website

*For more information about the VCP*, contact Ted Huscher , DEQ, 402-471-2214, or visit the DEQ website at [www.deq.state.ne.us](http://www.deq.state.ne.us).

*For more information about the federal Brownfields Act*, contact Bob Richards, EPA Region 7, 913-551-7502, [r7-brownfields@epa.gov](mailto:r7-brownfields@epa.gov), or visit the EPA website at [www.epa.gov/brownfields](http://www.epa.gov/brownfields).

Article by Amy Callahan

## How to Contact Us

If you have questions, comments, or suggestions for future topics for this newsletter, please contact the Public Information Office.

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# Source Water Grants Assist Community Water Protection Efforts

*Drinking water.* It's such a routine part of our daily lives that it can easily be taken for granted. If you need a drink, you just turn on a faucet, or find a water fountain. It is nearly always available, so it is easy to overlook how important drinking water is to the health and vitality of our communities. If a community's water supply becomes contaminated, daily routines may be immediately disrupted, and the community may be faced with an expensive search for a new water source.

In 1986, Congress recognized the critical importance of drinking water sources and amended the Safe Drinking Water Act to create the Wellhead Protection Program. Congress again amended the Safe Drinking Water Act in 1996 to create the Source Water Assessment program. Many Nebraska communities are currently protecting their drinking water source with the help and guidance of these programs.

To further assist public water suppliers with source water protection, grant funds are now available annually through the Drinking Water State Revolving Fund. Funding is available for source water protection activities that address drinking water quality, quantity, security, or education. In 2004, Nebraska communities and other public water suppliers submitted eighteen source water protection proposals requesting over \$600,000.

Representatives from the Department of Environmental Quality, Nebraska Health and Human Services System, Nebraska Rural Water Association, and Nebraska Association of Resources Districts reviewed the proposals and announced the 2004 grants in August. Ten projects were selected, and a total of \$214,706 was distributed to assist public water supply systems with protecting the sources of their water.

*Continued on next page*

## "Cash-for-Grass" Program Promotes Drought Tolerant Landscaping



Above: Buffalograss sod is delivered to a Sidney residence.

Photo provided by South Platte NRD

The South Platte Natural Resources District received a 2003 Source Water Protection grant to implement a pilot program called "Cash For Grass." The pilot program's goal is to protect area ground water through the use of drought-tolerant landscaping. Sidney residents who participated in the program were given rebates for removing irrigated lawn, and replacing the lawn with either buffalograss sod or xeriscape plants and mulch. A total of 15,800 square feet of lawns were replaced, contributing to ground water protection through reduced water and fertilizer use. The Natural Resources District plans to expand the program in 2005.

## Toxic Algae, continued from page 6

getting the message to the public about this situation, and informing the state's citizens about the precautions that they should take.”

Looking to next year, the state intends to be even better prepared to deal with the issue. Steve Walker, DEQ Water Quality Assessment Section Supervisor, said the group that has been dealing with this issue, as well as other experts in the field, will continue to discuss issues to prepare a strategy for addressing the situation in 2005 and subsequent years.

“This is the first year that we have collected substantial data about toxic algae in Nebraska’s lakes,” Walker said. “We’ll examine this information and data from other states as we look at our long-term plans.”

Walker said DEQ recently applied for and was awarded an EPA grant to conduct a detailed study of the specific conditions that favor blue-green algae blooms in Nebraska lakes. This study will also test the use of weekly overflights – aerial photography using remote sensing technology — to quickly identify lakes with large or expanding masses of blue-green algae.

With this detailed information, the state hopes to be able to identify actions that could help reduce the occurrence of blue-green algae, Walker said. The state will also attempt to develop a predictive early warning system for the public about lakes with potential toxic algae problems before dangerous toxin levels actually occur.

“We plan to target substantial resources into blue-green algae monitoring in the future and we are applying cutting edge technology to better understand the formation of blue-green algae blooms and the release of toxins,” Walker said. “Our goal is to do the best job we can to protect the public and animals against the adverse health effects that can be caused by blue-green algae blooms.”

Article by Brian McManus



## Francis co-chairs ITRC

Joe Francis, Associate Director and supervisor of the Department’s Division of Environmental Assistance, has been elected Co-Chair of the Interstate Technology Regulatory Council (ITRC).

The membership of ITRC consists of 44 states and over 400 individual members representing state government, industry, consultants, academia and public stakeholders. The ITRC was formed in 1995 to expedite the approval of new technologies for cleaning up contaminated sites. Joe will serve a three-year term.

## Source Water Grants, continued

Chosen for 2004 funding were:

- Beaver Lake Association, Cass County: Protect Our Water for Tomorrow – \$57,200
- City of Albion: City of Albion Source Water Project – \$3,295
- City of Bayard: City of Bayard Source Water Protection Project – \$12,800
- City of Crawford: Crawford Source Water Protection Project – \$26,890
- City of David City: David City Recycled Water Project – \$33,000
- City of Kearney: Source Water Protection for Kearney Platte River Well Field – \$17,770
- City of Nelson: Protecting Our Water for Our Citizens – \$24,750
- Nemaha Country Rural Water District #2: Johnson Wells Source Water Protection Project – \$16,130
- Village of Allen: Improving the Water Quality and Usage in Allen, Nebraska – \$10,871
- Village of Western: Source Water Protection Project – \$12,000

For additional information about the Source Water Protection program and Source Water Protection grants, contact Deana Barger at (402) 471-6988 or visit the DEQ web site at [www.deq.state.ne.us](http://www.deq.state.ne.us). Select DEQ Programs/Water Quality Planning Programs.

Article by Rich Webster



## Report on Environment Being Developed; Two Reports Now Available

DEQ will soon publish a report on Nebraska's environment that will describe the overall condition of the state's natural resources and the significant environmental issues facing the state. In addition to examining the state as a whole, the report will describe conditions within four broad ecological regions. To help define the quality of our air, land and water, the report will use "indicators," which are specific measurements of a variety of environmental factors. The report is expected to be released in the spring of 2005.

The agency has also recently produced two annual reports that are now available to the public. DEQ's *Annual Report to the Legislature, 2004* provides an overview of agency activities, programs and budget information. The *2004 Groundwater Quality Monitoring Report* provides detailed information about groundwater monitoring conducted across the state.

If you would like to receive a copy of any of these documents, contact: Nebraska Department of Environmental Quality, Public Information Office, P.O. Box 98922, Lincoln, NE 68509-8922, or leave a message at [moreinfo@ndeq.state.ne.us](mailto:moreinfo@ndeq.state.ne.us).



Photo by Neal Heil