

TO: Honorable Governor Terry Edward Branstad
Charlie Smithson, Chief Clerk of the House
Michael Marshall, Secretary of the Senate
Ron Parker, Senate Democrat Caucus
John Hodges, Senate Republican Caucus
Joseph Romano, House Democrat Caucus Staff
Jeff Mitchell, House Republican Caucus Staff
Julie Vande Hoef, Governor's Office

FROM: The Environmental Protection Commission

DATE: January 18, 2012

SUBJECT: 2011 Annual Report and Recommendations

The Iowa Environmental Protection Commission (EPC) respectfully submits its Annual Report and Recommendations to the Governor and General Assembly of Iowa pursuant to Iowa Code Chapter 455B.105(5). The report presents what it considers the major activities and accomplishments of the EPC for 2011. More importantly, the Commission submits its recommendations for policy and legislative changes for 2012. These recommendations reflect the issues that the Commission has worked on over the past year and equally important reflect many of the comments we have heard from citizens of Iowa during our commission meetings and during formal public comment periods of our rules.

We thank you for your consideration of the report and its recommendations. The Commission stands ready to answer any questions you may have on the report and its recommendations.
Sincerely,

David Petty, Chair, Eldora
Environmental Protection Commission

Mary Boote, Secretary, Des Moines
Dee Bruemmer, Davenport
Nancy Couser, Nevada
John Glenn, Centerville
Dolores Mertz, Algona
Lorna Puntillo, Vice-Chair, Sioux City
Brent Rastetter, Ames
Marty Stimson, Cedar Rapids

IOWA ENVIRONMENTAL PROTECTION COMMISSION 2011 ANNUAL REPORT AND RECOMMENDATIONS

Pursuant to Code of Iowa Section 455B.105(5) the Iowa Environmental Protection Commission (the “Commission”) submits the following report to Governor Branstad and the Iowa General Assembly. As specified in the statute, this report discusses the accomplishments and status of the programs administered by the Environmental Services Division of the Department of Natural Resources. The report also makes legislative recommendations for consideration by the Governor and General Assembly based on Commission observations regarding the state of the environment in the past year. The report takes into account comments and concerns the Commission frequently hears from Iowa citizens.

In issuing this report and making these recommendations, the Commission encourages the Governor and the General Assembly to protect Iowa’s natural resources when developing statewide policies for economic development. The Commission believes the protection of the environment is consistent with and, in fact, promotes the development of a strong economy and enhances the quality of life necessary to attract workers and jobs to our state. The Commission’s recommendations are based on the understanding that proper environmental protection and economic growth are compatible goals for the State of Iowa.

BUDGET

As has been the case with all of state government, the DNR has faced a shrinking General Fund appropriation and reduction in staff over the past several years and anticipates reduced federal funding in the coming year. This has presented both challenges and opportunities for the Department. The DNR has conducted over 80 Kaizen events over the last decade, more than any other agency in state government, and continues to incorporate process improvement whenever appropriate. These events, that include the regulated community, have discovered ways that the Department can accomplish its mission of “protecting and enhancing our natural resources” with ever changing financial and human resources.

To meet the administration’s goals of increased economic development and job growth in the state, it will be critical that the DNR provide timely service to business and industry, all the while protecting our citizens, water, land, and air. The Department is striving to build stronger partnerships with businesses and communities. A successful partnership will rely heavily upon business, communities, and their consultants to provide sufficient and timely information and data such that projects can be reviewed and permits issued expeditiously.

Major Accomplishments of the Department and Commission in 2011

WATER QUALITY

Drinking Water

- The water supply rules package passed the Commission in November and established rules to:
 - Ensure public water supply systems using surface water sources have sufficient treatment to remove *Cryptosporidium* and other pathogenic microorganisms in drinking water;
 - Reduce potential cancer, reproduction, and developmental health risks from exposure to disinfection byproducts in drinking water, which are formed when disinfectants are used to control microbial pathogens. The rules strengthen public health protections for all persons served by the public water supply systems by targeting higher risk areas within each system and ensures that all persons are served water which meets the health standards; and
 - Updates both the laboratory methods used for drinking water sample analysis and the construction standards to current practices.

Portions of these rules had early implementation requirements that required significant effort on the part of Iowa's state water supply program staff, water supply operators, and environmental laboratories. Because of those efforts, over 99% of Iowa's 942 systems met the early requirements of these new rules and are well-positioned to provide safe water to Iowans as the remaining requirements become effective.

- The annual public water supply compliance report was presented to the Commission in August, which provides the Commissioners information about the condition of Iowa's public water systems for the previous year. In 2010, there were 1,966 active public water supply systems in Iowa, serving more than 2.8 million people. The most frequent violations of health standards continue to be coliform bacteria and nitrate.
- The water use and allocation program had an outdated computer database, which was inadequate for needs of the program. A multi-year and multi-phase project to improve the database and its functionality for both state program staff and permittees is underway. This project has entailed contracts and amendments that were approved by the Commission to develop and implement the specifications, programming, testing, and production. The permittees will be able to use the Internet to access the program for several necessary functions, which is more convenient, timely, and cost-effective. The database will also allow for better evaluation of Iowa's water resources which is vital for ensuring sustainable communities and commerce.

Clean Water

- The EPC approved final rules for the following:
 - General Permit 5 renewal - Identifies conditions under which quarry dewatering is permitted.
 - General Permit 7 - Identifies conditions under which discharges from aquatic nuisance pesticide applications are permitted.
- The EPC authorized a contract to update the NPDES database. With updates, the database will conform to current database structure and security standards.

AIR QUALITY

In 2011 the Air Quality Bureau, working in collaboration with regulated industry and the public developed seven proposals for reducing the regulatory burden on industry while continuing to assure that air quality is protected for all Iowan's. The results of these efforts will not only help to reduce the cost of compliance for industry struggling to recover from the economic recession; but will help the department streamline regulatory efforts to focus on protecting air quality and providing meaningful environmental reviews of new projects. In brief these seven actions will:

1. Provide additional flexibility for regulated portable plants (e.g. concrete batch) by reducing the notification time, and allowing electronic submittals,
2. Reduce the number of portable plants required to report emissions triennially by initiating a review and analysis of portable plant emissions,
3. Reduce regulatory burdens by eliminating state-only emissions testing procedures (the Compliance Sampling Manual) and adopting, federal methods for emissions testing,
4. Offer uniform regulations by updating the definition of particulate matter and other air quality definitions to be consistent with federal regulations,
5. Increase transparency and consistency in conducting emissions testing by placing into rule the specific procedures for conducting emissions testing,
6. Reduce unnecessary air dispersion modeling reviews while still protecting public health,
7. Listing (in rule) procedures available to DNR when undertaking compliance or enforcement.

In 2011, the department saw a significant increase in air construction permit requests. From December 2010 – November 2011, the Air Quality Bureau issued 2,014 pre-construction permits (or made specific permitting determinations) for facilities planning to build or modify air pollution emitting equipment at industrial facilities. In the same period in the prior year 1,660 permits were issued. Permitting projects each have around 2-3 permits, and it took, on average 106 days to issue each project. This turn-around time is higher than normal due to additional work on issuing permits for several long term projects which involved legal issues and the higher number of projects. In addition, the Air Quality Bureau issued an unprecedented number of Prevention of Significant Deterioration (PSD) projects for large new or additional industrial projects. Those 27 projects were issued on average in 9.2 months. In the prior year the bureau issued 8 PSD projects.

Industrial facilities are considered “Major” sources of air pollution, if annually the facility emits over 100 tons of one or more common air pollutants, or 10 tons of one or 25 tons of all hazardous air pollutants. This federally established designation of large sources of air pollution brings an obligation for those facilities to operate under a state issued “Title V (five)” operating permit. There are 276 facilities in Iowa subject to the Title V operating permit program. During 2011, the Air Quality Bureau issued 32 operating permits. This is a lower than normal output of permits due to a 30% reduction in the number of staff working on these permit due to funding limits. As a result there is a current backlog of 105 applications in-house. To maintain timely 5-year permit re-issuance rates, more than 50 permits should be issued annually.

Staff reductions in 2010 reduced DNR's ability to respond timely to requests for air quality records information. In response to an increase in the number of requests for public records

information, an online air quality records search system was further implemented in 2011 to allow for external access via the internet. The new system allows the DNR to respond to information requests more efficiently and provides greater transparency. In 2011 alone, there were more than 120,000 pages downloaded from the online system, saving the public more than \$50,000 in copying costs and it likely saved thousands of miles traveling to Des Moines. The DNR will need to continue to focus on responding to the decreased resources available for information technology support in 2012.

In 2011, the DNR and its small business assistance partners initiated the development of new online training tutorials and webinars that were available at no charge to more than 600 businesses. As additional federal regulations are implemented in the future, the DNR will need to continue to focus on responding to the regulatory assistance needs of Iowa businesses and industries.

The DNR also developed the 2011 Annual Air Monitoring Network Plan to compare federal monitoring requirements to the existing Iowa network, identify proposed network changes, and ensure monitors are in place to determine compliance with National Ambient Air Quality Standards (NAAQS). The department also developed reports on the status of Iowa's air quality relative to the NAAQS and provided information on NAAQS exceedances throughout the year.

ANIMAL FEEDING OPERATIONS

Field Services conducted 183 MMP (Manure Management Plan) on-site inspections during SFY 2011. Inspections were based on a combination of 1) responses to complaints from the public, 2) possible discharge resulting from application, 3) response to a producer requesting assistance, and 4) MMP submittal spot check verification. The following table summarizes the program inspection categories.

ESD Field Services Bureau Animal Feeding Operations Inspections, SFY 2008 - 2011

Program Inspection Categories	SFY 2008	SFY 2009	SFY 2010	SFY 2011	*SFY 2012 Projection
Total Confined Animal Feeding Inspections	227	119	7	29	30
Total Site Survey Inspections (for construction)	291	187	45	84	85
Total Open Feedlot Inspections	104	141	147	107	105
Total MMP Inspections	652	819	299	183	180
Total AFO Basin Inspections	586	660	572	618	615
Total Concrete Inspections	126	109	4	1	1
Grand Total AFO Inspections	1,986	2,035	1,074	1,022	1,016

* SFY 2012 inspection numbers are projected to be roughly the same, or slightly lower than the numbers for SFY 2011, based on the fact that the program has approximately 1.5 fewer full-time staff for SFY 2012.

Five public hearings were held in January, 2011 to obtain comments on proposed rules to implement federal legislation requiring concentrated animal feeding operations to comply with applicable EPA requirements regarding NPDES permits. On March 15, 2011 the U.S. Court of Appeals for the Fifth Circuit issued a decision which vacated part of the EPA requirements. Therefore the Commission terminated the rulemaking in June, 2011. Once EPA revises the NPDES CAFO regulations to comply with the Fifth Circuit's decision an appropriate rule package will be presented to comply with the EPA regulations.

SOLID WASTE

Pollution Prevention Intern Program

Pollution Prevention Services provides confidential, non-regulatory technical assistance to business and industry; working with plant managers to identify and implement environmental improvement projects, leading to more efficient use of resources and economic savings. The assistance provided industry, include:

- Assessments services;
- Nationally recognized Intern Program;
- Environmental management systems assistance; and
- Workshops & training.

Through the intern program, upper-level engineering and environmental science students from Iowa colleges and universities provide host companies with a designated resource to analyze processes, research alternatives, evaluate efficiencies, document savings and provide implementation support of environmental projects. During 2011, 15 12-week and 5 24-week interns helped Iowa companies achieve the following savings:

- \$1,236,487 million dollars
- 21,849,252 gallons of water
- 296 tons of solid waste
- 5,833 gallons of hazardous waste
- 9 tons of hazardous waste
- 10,921,589 kilowatt hours of energy
- 113,073 therms of natural gas

Since 2001, over 250 Pollution Prevention Interns have *saved 150 companies more than \$66.1 million dollars* by recommending and implementing projects that conserve resources and improve processes. The following list is testimony to these accomplishments in terms of wastes that have been eliminated or reduced:

- 1,119,806,206 gallons of water
- 200,048 tons of solid and special waste
- 1,512,492 gallons of hazardous waste
- 560 tons of hazardous waste
- 42,817 grams of mercury abated
- 312,374,233 kilowatt hours of energy
- 6,881,138 therms of natural gas

PUBLIC HEARINGS

Approximately 26 public hearings were held around the state seeking public input on a variety of issues, as outlined in Table 1. It is estimated that 136 people attended these hearings and 373 people provided written comment.

TABLE 1 - 2011 Public Hearings				
Chapter	Description	# of Hearings	# of People	# of Written
			Attended	Comments
22,33	Biogenic emissions of CO2	1	0	2
22,30,&33	Terminated - Title V Fee Cap	2	6	10
40-43,83	Drinking Water and Laboratory Certification Programs	1	0	2
48	Terminated – <u>GHEX Closed Loop Ground Heat Exchangers</u> ; Ch. 38; Ch. 39; Ch. 49; Ch. 82`	6	24	19
61	Nutrient WQ Standards for Lakes to Support Recreational Use	7	36	105
64	WW Construction and Operation Permits	1	3	0
65	Terminated - Animal Feeding Operations; Confinement NPDES	5	67	235
135	Legislative Amendments to Underground Storage Tank Rules	3	0	0
		26	136	373

Recommendations for Future Legislative Action

WATER QUALITY

- Continue dedicating resources to improve nutrient management and reduce non-point source pollution from all sources to decrease impairment of Iowa's waters. Episodes of *Cyanobacteria* blooms and elevated ammonia levels threaten surface waters, while excessive nitrate and *E. coli* levels threaten both surface and ground waters. Peoples' health can be at risk from recreational activities in impaired waters. Drinking water systems must react with more treatment at added cost to produce water fit for human consumption.
- Modify management of the Jordan aquifer to possibly allow additional water withdrawals while protecting against over allocation of these water resources. Water resources are vital in meeting critical economic development needs for industries and public water supplies. The Silurian aquifer in eastern Iowa should also be evaluated in order to protect it from over use and damage to the aquifer structure itself.
- Revise water supply rules to incorporate federal rule changes projected to occur in 2012, with the addition of a new rule that requires source water monitoring if fecal bacteria contamination is detected in a groundwater public water supply system; amendments to lead and copper rules to require notification of the homeowners of the lead levels detected in their home; and additional analytical methods.
- In accordance with Senate File 407, which was passed in April, continue rulemaking that will define how communities qualify as disadvantaged communities when complying with wastewater treatment regulations.
- Renew General Permit 4 for discharges from private sewage disposal systems and Stormwater General Permits 1, 2, and 3.
- Clarify time of transfer rules for private sewage disposal systems.
- Initiate rulemaking for land application of on-farm food processing waste.
- Seek 401 certification for the 404 nationwide permit renewals.
- Update and streamline wasteload allocation procedures (updated methodologies and science to) which are used to determine limits used in NPDES permits.
- Review flood plain and dam safety rules to clarify and update as needed.

AIR QUALITY

Focus resources on permitting new construction in support of economic recovery while protecting the quality of the air we breathe. Escalating rates of requests for permits for new

construction, or for permits for equipment upgrades or changing product lines is stretching the limits of the current staffing levels.

Adopt appropriate regulatory plans for assuring that the entire state will meet the health-based National Ambient Air Quality Standards for fine particulate (PM2.5).

Establish a plan for eliminating violations of the Lead National Ambient Air Quality Standard in Council Bluffs to bring the area back into attainment. Submission of a plan to EPA, and three years of non-violating air quality monitoring results are necessary to remove the federal nonattainment designation issued in December 2011.

In collaboration with communities and businesses, establish firm commitments for emissions reductions to assure that air quality in the Muscatine area meets air quality standards for fine particulate (PM2.5) and sulfur dioxide (SO2) as soon as possible.

Seek support to adjust current funding mechanisms to assure that fees paid correlate to the services provided for permit issuance and oversight, and that adequate funding is available to provide those services. This will be critical to our ability to provide customer service to industry and the public.

Utilize Kaizen Lean principals to reduce the backlog in Title V operating permit issuance; and obtain necessary resources to issue new permits and permit renewals. By the end of 2012, it is anticipated that the Air Bureau will have a backlog of 125 Title V operating permit applications. Federal requirements trigger an increase in the number of sources subject to the permit program from 276 to 308. The increasing backlog projected over the next year makes the establishment of sustainable funding and staff resources for the Title V program more important than ever.

ANIMAL FEEDING OPERATIONS

It is recognized that animal feeding operations remain a significant part of our states sustainable farming operations. As such, the EPC requests additional funding to help support the Iowa Department of Natural Resources' animal feeding operations program to provide compliance assistance and enforcement activity where necessary to Iowa's growing agricultural community.

SOLID WASTE

The DNR does not feel that additional legislation is needed to address the management of coal combustion waste and are not requesting that the Legislature provide any. The revision of CCR disposal regulations will result in more protective management and disposal operations, without the unwarranted burden and stigma associated with hazardous waste designation, while also providing long-term monitoring and closure responsibility at these sites. The DNR asks for the Legislature's support in this rulemaking.

Conclusion

The Commission recognizes that the state is in a difficult budget situation. Nevertheless, taxpayers will pay for corrective action eventually if proper enforcement of anti-pollution laws is not followed. In budgeting, the legislature should provide the Department with a sufficient budget

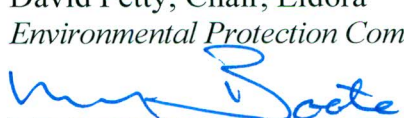
for an effective environmental enforcement program and sufficient funds for the Department to operate its permitting programs in a timely and efficient manner.

It is clear from public comment before the Commission that Iowans want and expect clean air and clean water. It is evident that Iowans are concerned about other global environmental issues, such as energy efficiency, climate change, and declining biodiversity. The Commission believes that Iowans, working in a partnership of individuals, government and business representatives, will meet the challenges of environmental stewardship in the 21st century.

The Commission thanks the Governor and the General Assembly for the opportunity to submit this report and invites further inquiry and conversation about these issues.



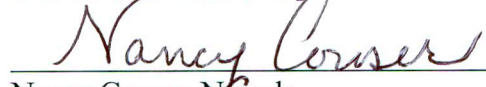
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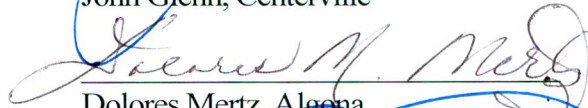
Dee Bruemmer, Davenport



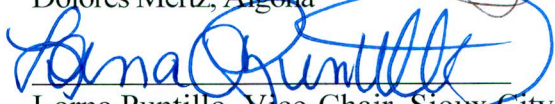
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