Summary

Environmental Protection Commission

Tuesday, January 13, 2009
DNR Air Quality Building
7900 Hickman Road
Urbandale, Iowa

Minutes for EPC monthly meetings are posted to the website after Commission approval.

10:00 AM – Meeting begins

10:30 AM – Public Participation

1:00 PM - 76 Ltd. (Washington County) – Animal Feeding Operations / Air Quality / Solid Waste

	Agenda topics	Meeting Results
1	Approval of Agenda	
2	Approval of Minutes of 11-10-08	
3	Director's Remarks	
4	IDALS-DSC – Nonpoint Source Program Administrative Staffing Assistance Contract	Carried (Decision)
5	Notice of Intended Action: Chapter 65-provisions limiting the surface application of manure/open feedlot effluent on frozen or snow-covered ground	Carried (Decision)
6	Proposed Rule - Amend IAC 567 Chapter 134, Certification of Groundwater Professionals and Underground Storage Tank (UST) Compliance Inspectors	(Information)
7	Referrals to the Attorney General • Maple Grove Farms, L.L.C. (Plymouth County) – Animal Feeding Operations • 76 Ltd. (Washington County) – Animal Feeding Operations / Air Quality / Solid Waste	Carried (Decision) Failed (Decision)
8	Anthony Herman dba Mighty Good Used Cars Appeal of Proposed Decision	Postponed till February (Decision)
9	Review of Regulatory Options for Addressing the Vacatur of CAMR	(Information)
10	Final Rule: Chapters 22 and 23: Air Quality Program Rules – Adoption of federal air quality standards and revisions to air construction permit requirements	Carried (Decision)
11	Notice of Intended Action – Chapter 61 – Water Quality Standards (Stream Reclassifications via Use Assessment and Use Attainability Analyses – Batch #2)	(Information)
12	Final Adoption – Chapter 69 – Onsite Wastewater Treatment and Disposal Systems, NPDES General permit #4 and Chapter 64, "Wastewater Construction and Operation Permits"	Carried (Decision)

13	Notice of Intended Action -Chapter 65 – Definitions and Regulations Pertaining to NPDES Permits	Carried (Decision)
14	Annual Report to the Governor	Carried w/ amendments (Decision)
15	Draft amendments to 65.10(5); construction permit "demand for hearing" procedures	(Information)
16	Monthly Reports	(Information)
17	General Discussion • Cancel May 18th Tour and Host May 19th EPC in Urbandale • Water Quality Advocate Bi-Annual Update • Coal Ash Disposal Update	
18	Items for Next Month's Meeting • February 17th – Urbandale • March 17th – Cedar Rapids	

For details on the EPC meeting schedule, visit www.iowadnr.com/epc/index.html.

MINUTES

OF THE

ENVIRONMENTAL PROTECTION COMMISSION

MEETING

JANUARY 13, 2009

INGRAM OFFICE BUILDING
7900 HICKMAN ROAD
URBANDALE, IOWA

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MEETING MINUTES

CALL TO ORDER

The meeting of the Environmental Protection Commission was called to order by Chairperson Henry Marquard at 10:10 a.m. on January 13, 2009 in the Ingram Office Building, Urbandale, Iowa.

COMMISSIONERS PRESENT

Suzanne Morrow, Secretary – on teleconference
Gene Ver Steeg
David Petty
Susan Heathcote
Henry Marquard, Chair
Paul Johnson
Martin Stimson
Shearon Elderkin

COMMISSIONERS ABSENT

Charlotte Hubbell, Vice-Chair

ADOPTION OF AGENDA

Move: Director's Remarks to under General Discussion

Delete: Anthony Herman dba Mighty Good Used Cars – Appeal of Proposed Decision - Attorney unable to make it to Des Moines due to inclement weather.

Motion was made by David Petty to approve the agenda as amended. Seconded by Shearon Elderkin. Motion carried unanimously.

APPROVED AS AMENDED

APPROVAL OF MINUTES

December 9, 2008 minutes
Postponed until the February meeting.

November 10, 2008 minutes
Susan Heathcote made the following changes:
Page 9 – Change bolded ***and*** to unbolded *or*
Next sentence below – Change the *or* to bolded ***and***

Page 17 – Keep the III. Administrative language the same as in the contract itself.

Motion was made by Shearon Elderkin to approve the November 10, 2008 minutes as amended. Seconded by Gene Ver Steeg. Motion carried unanimously.

APPROVED AS AMENDED

CONTRACT - IDALS-DSC – NONPOINT SOURCE PROGRAM ADMINISTRATIVE STAFFING ASSISTANCE

Allen Bonini, Supervisor of the Watershed Improvement Section presented the following item.

Recommendation:
The Department requests Commission approval of a contract in the amount of $66,506.00 with the Iowa Department of Agriculture – Division of Soil Conservation (DSC) for one (1) year to provide administrative staffing assistance for existing and future section 319 nonpoint source pollution watershed improvement projects.

Funding Source:
This project will be funded through US EPA Section 319 Nonpoint Source Program grant dollars.

Background:
The Department shares in the funding of one position in IDALS-DSC to jointly support administration of Department 319 and DSC WPF/WSPF watershed improvement projects. Support for this shared position has been ongoing for several years.

Purpose:
The purpose of this contract is to retain DSC to assist the Department in the administration and implementation of Iowa's nonpoint source pollution management program through the retention of a position for this purpose in DSC's Field Services Bureau. The cost for this position, including salary and fringe benefits, DSC's associated indirect costs, and travel and per diem costs (excepting in-state transportation costs), shall be shared by both parties.

Consulting Firm Selection Process:
NA

Scope of Work:
For an outline of the **scope of work**, see the attached Section 5.1 of the Contract.

Motion was made by David Petty to approve the contract as presented. Seconded by Paul Johnson. Motion carried unanimously.

APPROVED AS PRESENTED

PUBLIC PARTICIPATION

JOHN KALLEN, representing MidAmerican Energy submitted the following comments:

- During today's meeting, DNR staff will be presenting several regulatory options for addressing the vacatur of the Clean Air Mercury Rule (CAMR).
- MidAmerican Energy Company encourages the Environmental Protection Commission to adopt Option 2 and rescind the Clean Air Mercury Rule provisions from the Iowa administrative rules by amending 567 IAC Chapters 23, 25, and 34.
- Continued compliance with the vacated CAMR is not possible and places both regulated entities and the Iowa DNR at risk of agency and/or third party enforcement actions.
- Imposing these current obligations on MidAmerican facilities would result in the inability to achieve compliance through no fault or negligence on the part of MidAmerican.
- At its October 14, 2008 meeting, the EPC deferred action on the DNR's Notice of Intended Action to rescind the CAMR provisions.
- MidAmerican believes it is necessary and appropriate to remove from the state air quality rules the CAMR regulations for the following provisions.
    - The U.S. Court of Appeals for the District of Columbia Circuit has original jurisdiction over appeals from federal agency rules, including those promulgated by the U.S. Environmental Protection Agency. The court's rulings vacating the CAMR are currently on appeal but have not been stayed. Therefore, the CAMR can not be implemented by the EPA, by the state of Iowa, or by any other state.
    - Mercury monitors are in place for all of MidAmerican' coal units. However, the monitors have not been certified (RATA) to collect valid compliance data. These monitors can not be certified because there is no approved standard by which to certify the mercury monitors. In addition, via letter dated June 19, 2008, the DNR communicated to regulated entities that as a result of the CAMR vacature, the January 1, 2009 certification requirement is no longer in place.
    - The accuracy of the mercury monitoring systems in a utility stack emissions measurement setting has considerable room for improvement. MidAmerican's experience has shown that significant differences between the Method 30B measurements (sorbent trap) and the mercury continuous emission monitor (CEMS) exist. The CEMS results are erratic and do not line up with actual Method 30B test results. Large unexplained swings in the measured stack mercury concentration have been observed.
    - To date, no CAMR compliance allowances have been allocated.
- Concerns was expressed by several EPC Commissioners at the October 14, 2008 meeting that rescinding these vacated federal regulations would unduly harm the environment and jeopardize the public health of Iowa citizens.
- MidAmerican wants to address these concerns by highlighting that we as a company are committed to operating in an environmentally responsible manner that is protective of public health and the environment.
- This commitment has been demonstrated in the near-term investment of over **$400 million in significant capital projects** to reduce and monitor emissions from its coal-fueled electric generating units.

- Specific to mercury, the following investments have been made:
  - The Walter Scott Energy Center Unit 4 was among the first entities in the United States to install controls to reduce mercury emissions. Prior to the promulgation of the now vacated CAMR, MidAmerican committed to the installation of an activated carbon injection system at the Walter Scott Energy Center Unit 4 and continues to operate that system.
  - Continuous emissions monitors for mercury have been installed at all of MidAmerican's coal fueled facilities.
  - Additional mercury control is planned for the Walter Scott Energy Center Unit 3 and Louisa Generating Station. Further, the completed addition of a scrubber and baghouse at Louisa Generating Station and the ongoing addition of a scrubber and baghouse at Walter Scott, Jr. Energy Unit 3 have ancillary benefits of reducing mercury emissions (in addition to SO_2 and particulate) and position these entities to make significant reductions in mercury emissions.
- These projects were voluntarily accelerated in advance of the compliance requirements of CAMR and the **control equipment will continue to be operated** ***regardless*** of the final outcome of appeals in the CAMR litigation.
- In closing, MidAmerican requests that the EPA adopt DNR's proposed option 2 and rescind the vacated CAMR provisions as currently reflected in the Iowa regulations at 567 IAC 23.1 (2)(z), 23.1(5)(d), 25.3 and 34.2 through 34.308 including applicable tables, and all other references to requirements originating under CAMR.

MidAmerican would like to weigh in one additional matter.

- MidAmerican is aware that amendments to regulation and beneficial use of coal combustion residue are being considered by the DNR and will be discussed during today's meeting. MidAmerican would be pleased to answer any questions that the Commission and DNR has about our coal combustion residue and product management and to participate in any advisory committee formed.

Henry Marquard noted that a letter dated on January 6, 2009 from Cathy Wollums with MidAmerican Energy was mailed to each Commissioner.

MARIAN RIGGS GELB, Executive Director of Iowa Environmental Council asked that the Department rethink the its decision to postpone the rulemaking process on coal combustion waste. Coal combustion waste is known to contain heavy metals, which are known to be a threat to water supplies and human and aquatic life. A significant portion of coal combustion waste is being disposed of in unlined quarries. This poses a serious threat to ground water. This sort of testing has been done at other sites. There are four counties in Iowa with unlined landfills. The council is concerned that the disposal sites are close to water supplies and waterbodies. Iowa is also a recipient of coal combustion waste from several other states. The fact is, household garbage is managed more closely than coal combustion waste at this point and we think this is a huge loop hole in the state's management strategy. Therefore, at a minimum we are requesting that the DNR give all Iowans the opportunity to comment on this proposal to suspend the revisions in these rules. We therefore ask the DNR to do the following: provide statewide public lists of the July 2008 Chapter 567-108 revisions, take additional public comment on those revisions, and expand the stakeholder process to include representatives from public health,

environmental organizations and agencies. The Environmental Council would like to be apart of the process. Lastly, we would like to ask that public hearings be held in counties that have coal combustion disposal sites. By doing this, DNR can ensure that human health; safety and the environment are considered.

Henry Marquard noted a letter dated on January 8, 2009 from Plains Justice in regards to IAC Chapter 567-108 Beneficial Use Determinations: Solid By-products as resources and alternative cover material.

Susan Heathcote made mention of the coal-ash editorial in the Des Moines Register today.

(Both were distributed to Commissioners)

NEILA SEAMAN, Director of the Iowa Chapter of the Sierra Club addressed three agenda items. The Iowa Chapter of the Sierra Club never supported the Clean Air Mercury Rule and we were glad when the DC court vacated it. Now, Iowa was so diligent in addressing some of the concerns. According to the DNR's background document, the Clean Air Mercury rule was not intended to reduce emissions but rather to guarantee national emission reduction. DNR documents indicated that one of your considerations is that regardless of the options selected the state rule will allow modifications in permits to mitigate excessive mercury deposition from a major source will be retained. I'm curious as to how much testing will be completed to know exactly how much emission sources are contributing to ecosystem at the mercury deposition level. We have said this before and I'll say it again, the Sierra Club believes that additional fish testing needs to be done to know exactly how much of a mercury problem we have in the state.

If you approve option 2 as DNR recommends, one of the "cons" the facility may not continue to monitor for mercury. Yet in another section, it indicates that nearly all CAMR facilities will continue to monitor for mercury. Somehow we need to get a handle on how much mercury Iowans are being exposed to.

NPDES permit rule – the proposed changes are very minimal in bringing Iowa closer to compliance with federal law however, they are legislative changes strongly recommended by EPA to support and pass them today.

Construction permit demand for hearing procedures - We believe that these rules should be drafted by independent counsel and not the DNR legal staff. DNR is an advocate at these hearings, there to justify the Department's approval of the permit. We believe it's a conflict of interest if the DNR drafts the rules. We believe that the neighbors should have the opportunity to comment at the hearing. If you choose to move forward with a review committee, then those meetings should be subject to the open meetings law.

SONIA SKIDMORE, representing ICCI said that she would also support third party involvement in the drafting of the construction permit – demand for hearing rules. Neighbors and those impacted by the facilities that are being applied for, have spent a lot of time researching and gathering information regarding the impacts of CAFOs. They are truly experts and put far more

time in researching than supervisors do. Their input should count. If the permit does not satisfyfull requirements, then it should be denied before reaching the commission.

----------End of Public Participation----------

NOTICE OF INTENDED ACTION: CHAPTER 65 – PROVISIONS LIMITING THE SURFACE APPLICATION OF MANURE/OPEN FEEDLOT EFFLUENT ON FROZEN OR SNOW-COVERED GROUND

Claire Hruby presented the following.

Manure on Frozen and Snow-Covered Ground

Response to Issues Raised at the December EPC Meeting

Two important issues were raised at the December EPC meeting regarding the draft rules.

1. Roofed deep bedded cattle operations are commonly classified as confinements, which means that the proposed rules apply to them when they exceed 500 animal units. In contrast, most open feedlots would not have to abide by the proposed rules unless they exceed 1000 animal units. In effect, this provides an incentive for cattle producers to raise their animals in open feedlots which generally pose a greater risk of runoff than roofed operations. Also, the classification of these operations as confinements means that there are separation distance requirements and more stringent restrictions on manure control. According to some producers, these operations do not have space available under the roof for more than 2 weeks of manure production. They have requested an exemption from the February 15th to April 15st prohibition on manure application when the ground is frozen or snow-covered.

Response: The Department recognizes that this type of operation poses less risk to water quality than un-roofed open feedlots and commends producers for choosing to raise animals in this manner. Based on the available research, we still believe there is an increased risk of loss of nutrients and bacteria from any type of solid manure if it is applied to frozen or snow-covered ground, especially in late winter.

It should be noted that the date restriction (February 15th to April 15th) ONLY applies to frozen or snow-covered conditions. The need to have enough storage capacity for 60 days is a worst-case scenario. In 2006, for instance, there was a big snowstorm that hit northwest Iowa in mid-March, but by March 27th no snow was left on the ground and by the 29th the ground had thawed completely. According to the Iowa Environmental Mesonet, the probability of 4 inch soil temperatures below 32 degrees F in Calmar (far NE Iowa) is 0% after April 10th. Snowfall over 1 inch is possible in Calmar until the end of April. In southern Iowa (Muscatine) the probability of frozen ground is 0% after March 21st and average snowfall does no not exceed 1 inch after April 15th.

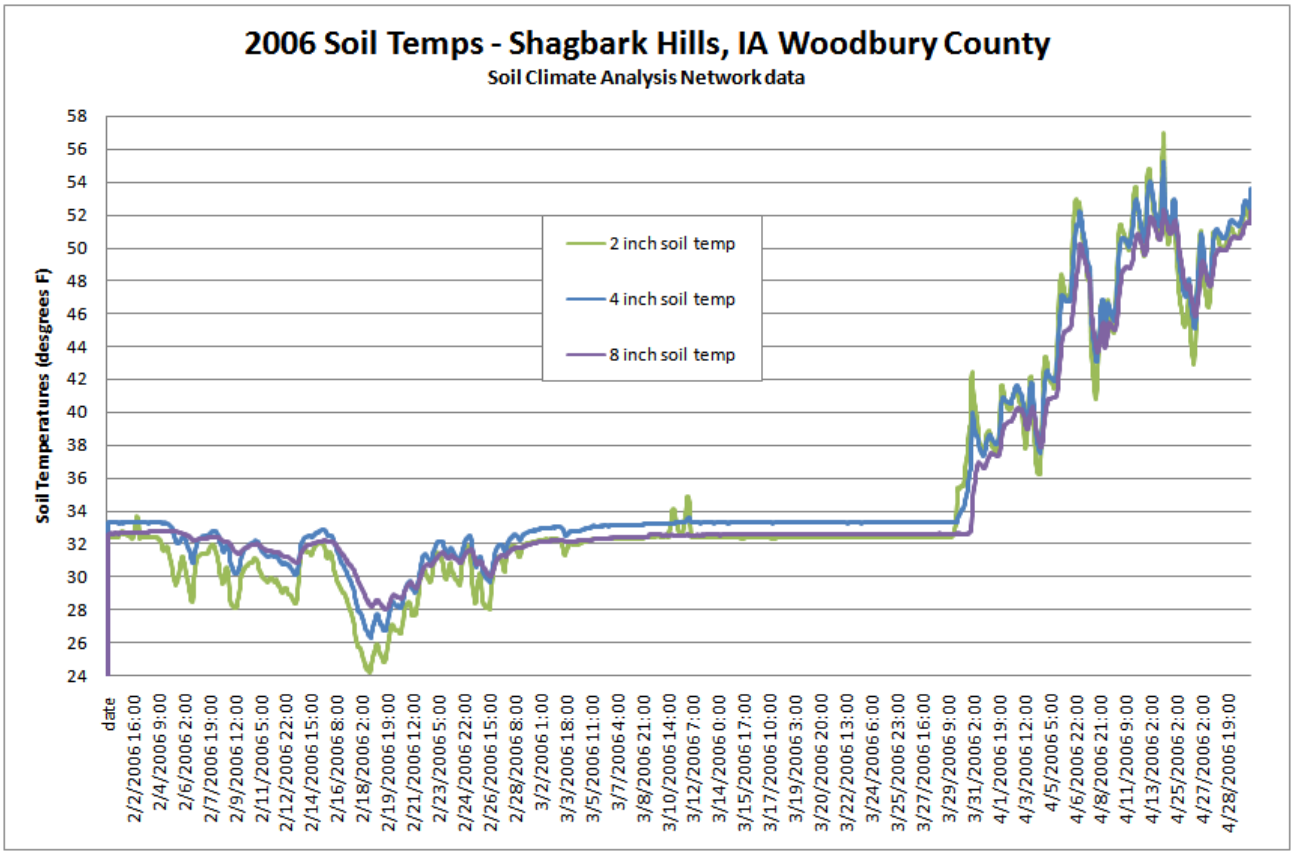
Deep bedded barns, such as hoop barns and monoslopes, have a variety of management practices that can be used successfully to operate the facility. Most of the manure and bedding is stored in the barn until the cattle are sold and the manure is removed from the building for land application or storage. Some operations do scrape the area by the feed bunks regularly to prevent manure build up in that area. That scraped manure can be moved back to the bedding pack or removed from the building for land application or storage, with the seemingly preferred practice to remove it from the building. An overview of the construction and operation of these barns presented by Shawn Shouse (ISU Extension) via webcast can be viewed at this address: http://connect.extension.iastate.edu/p54261684/.

A PIG (Program Implementation Guidance) has been developed and implemented to allow solid manure, including deep bedded manure, from confinement operations to be stockpiled as long as certain practices are followed. Since manure nutrients are more valuable due to the increased cost of commercial fertilizer, all producers should consider constructing a manure storage facility to protect the manure nutrients from weather in order to maximum use of these nutrients for crop production. This includes manure application and incorporation into the soil to minimize nutrient loss due to leaching or volatilization. While the manure storage facility requires an investment in the facility and time to move the manure in and out of the facility at an appropriate time, the investment should be worthwhile to protect the nutrients contained in the stored manure.

Current Iowa Code provisions regulate all confinements in the same manner regardless of the type of manure (solid or liquid) or the species-dependant nutrient content (cattle, poultry, or swine). Rather than attempt to provide a species-specific exemption to this proposed rule, we anticipate that legislative proposals during the upcoming legislative session may address this problem. To accommodate the concerns expressed by operators of deep bedded operations and to encourage this method of production over open feedlots, we propose to delay the effective date of 65.3(4)“c”(3) until October 1, 2010, for manure originating from deep bedded cattle operations. This will allow sufficient time for manure control issues to be resolved and give producers time to increase their storage capacity if necessary.

We would be more comfortable removing the predictive restrictions 65.3(4)“c”(1) and 65.3(4)“c”(2) than the date restriction in 65.3(4)“c”(3). National Weather Service predictions can change frequently and following or enforcing such a restriction may be very challenging.

2. Scraped snow and ice from open feedlots may contain some solid manure. Scraping the lots



is preferable to leaving the snow and ice on the lots both for reasons of animal health and potential runoff. Stockpiling large amounts of snow and ice is not a viable option either. Therefore, some exception should be made for this practice. Dave Petty stated that in a well-managed operation, where manure is scraped from lots prior to snow fall, scraped snow and ice is not likely to contain more than 10% manure solids. Determining percent solids in the field would be very difficult. Therefore, we feel the best option is to exempt scraped snow and ice (including incidental manure) from these rules with the understanding that producers are still responsible for any water quality violations that result from the application of these materials.

----------End of Clarie's comments----------

David Petty said that the weather is so unpredictable that putting dates in place will only limit operations from making the right choice. The dates don't match up with anything.

Commissioners went on to discuss the dates, why they are in place and where they came from.

Gene Ver Steeg said that he still doesn't see any emergency provisions. I also think we should delay all of these rules to see how the legislature will act on it. The three locations for hearings are not enough and the public comment dates should be extended. I think there will be a lot of interest.

Paul Johnson asked why there is a year delay before the rules will be implemented?

Claire Hruby said that it would allow time for producers to get into compliance, expand their storage systems, etc.

Randy Clark said that we can hold as many hearings as you would like, in any part of the state subject to the maximum 180 days after the last public hearing to adopt rules.

Motion was made by Gene Ver Steeg to table this rule until June to see what the legislature will do. Seconded by David Petty. Roll call vote went as follows: David Petty – aye; Susan Heathcote – nay; Sue Morrow – nay; Gene Ver Steeg – aye; Marty Stimson – nay; Paul Johnson – nay; Shearon Elderkin – nay; Henry Marquard – nay. Motion failed.

Susan Heathcote said that it would not be good to delay the rule based on the legislature's potential actions regarding this issue.

Paul Johnson asked what the surrounding states were doing.

Claire Hruby explained what Minnesota and Wisconsin have done.

Motion was made by Susan Heathcote to approve the Notice of Intended Action – Chapter 65. Seconded by Paul Johnson. Roll call vote went as follows: Susan Heathcote – aye; Marty Stimson – aye; Shearon Elderkin – aye; Paul Johnson – aye; David Petty – nay; Gene Ver Steeg – nay; Sue Morrow –aye; Henry Marquard – aye. Motion carried.

Wayne Gieselman said that he will commit to holding six public hearings near the field offices across the state.

APPROVED AS PRESENTED

DIRECTORS REMARKS

Director Richard Leopold gave the following update:

- Attended the Condition of the State address this morning. The Governor mainly touched on the floods and natural disasters that have affected Iowa.
- Will be attending a National Fish & Wildlife Conference in Washington, DC in mid-February. Also plan to meet with congressional delegation and Secretary of Ag, Tom Vilsack.
- There have been a few management changes within the Department. Lowell Joslin retired as Chief of the Law Enforcement Bureau, Marion Conover retired as Chief of the Fisheries Bureau. Pat Boddy, our new Deputy Director will start on January 20th.
- The Governor's Water Resources Council met in December for the first time. The will continue to move forward as mandated.

- The Department's main focus is on the budget. With recent budget constraints, we continue to try and maintain quality services with the amount of staff time available.
- The Sustainable Funding initiative continues to move forward. Minnesota just passed their Sustainable Funding bill last session.

INFORMATION

PROPOSED RULE – AMEND IAC 567 CHAPTER 134 - CERTIFICATION OF GROUNDWATER PROFESSIONALS AND UNDERGROUND STORAGE TANK (UST) COMPLIANCE INSPECTORS

Elaine Douskey presented the following item.

The Commission is asked to review the Notice of Intended Action to amend administrative rule 567—Chapter 134 "Underground Storage Tank Licensing and Certification"

The Commission adopted the UST Fund Board's existing UST installer and installer inspector licensing rules by emergency rule making in July, 2007. These revised rules are required to initiate a notice of intended action to fully implement a licensing program applicable not only to UST installers and installer inspectors but persons who remove and test USTS.

Changes: These rules are being modified as follows:

- Required insurance liability coverage for UST professionals is being raised from $250,000 to $1,000,000. This coverage amount was required through legislation in 2007, and further is consistent with industry standard.
- Requires licensing of people of remove tanks (including education, training and exam criteria).
- Clarifications on what type of work must be performed by a licensed professional vs. service technicians.
- Requirement for inspections of installations using departmental checklist & submittal.
- Increases the licensing fee for companies and individuals to $200 biennially (currently it is $50/yr).
- Expands the reciprocity criteria (recognizing training and exams from other states or equipment manufacturers – on a DNR approval basis)
- Adds a duty for UST professionals to report suspected & confirmed releases (currently the UST owner/operator must report these)
- Clarification on conflict of interest activities.

The commission will be requested to approve this Notice of Intended Action at their February 2009 meeting.

REFERRALS TO THE ATTORNEY GENERAL – 76 LTD.

Kelli Book, Attorney for the Department presented the following information. Mark Heiderscheit is here with me today from Field Office 6.

The DNR seeks referral of 76 Ltd. to the Attorney General's office for appropriate enforcement action due to the numerous violations of water quality regulations, solid waste regulations, and air quality regulations. 76 Ltd. is located in Keota and is owned and operator by John Klien, Kevin Greiner and Mark Beenblossom. The facility consists of four interconnected confinement building, two hoop buildings, and an earthen manure storage structure. The facility has 2,342 head of swine.

Our office got involved on September 19, 2008 to investigate a complainant about a road condition in a nearby park. Mark arrived at the facility and he noticed that there was standing water. The water was purple in color and tested >3mg/L for ammonia. An inspection of the earthen manure storage structure revealed the following: erosion of the outer berm; poor vegetation and weeds; trees and woody vegetation around the outer berm; less than two feet of free board; rodent holes and a discharge from the west side of the earthen manure storage structure to the road ditch. Mr. Heiderscheit also observed a burn barrel at the facility. Mr. Heiderscheit spoke with Mr. Bethke and informed him of the manure discharge. Mr. Klein indicated that they would bring in a vacuum truck the following day to remove the discharge from the ditch. Mr. Bethke was only one in three who had the proper manure applicator certification.

Mr. Heiderscheit followed up the next day and noted that a spray irrigator was being used. He also observed purplish colored liquid being discharged from a tile line to the West Fork or Crooked Creek. Mr. Heidersheit contacted the facility and had them turn the pumps off and stop discharge immediately. Mr. Heiderscheit visited locations along the creek to check for signs of a fish kill. There was no evidence of a fish kill at this location.

Mr. Heiderscheit visited the site again on the 21st of September. The discharge had stopped however, Mr. Heiderscheit observed dead animals on top of the compost pile and leachate flowing downhill from the pile. The burn barrel contained various solid waste materials, including paint cans, plastic bottles, etc.

On the 23rd of September, the basin had not yet been pumped down to meet the required two feet of freeboard. There were still issues with poor vegetation and erosion of the berm. The field office informed Mr. Klein that they would visit the site every other day until the earthen manure storage was pumped down.

On September 24th, DNR Field Office 6 issued a Notice of Violation for numerous water quality, air and solid waste violations. The letter required 76 Ltd. to take some action steps. It also indicated that the matter was being reviewed for further enforcement.

On September 26th, the earthen basin storage structure had not been pumped down to meet the two feet of freeboard. DNR personnel noted continued problems with the berm.

October 2nd, the DNR staff conducted another follow up visit. During this visit, the person who was pumping manure at the facility was not properly certified to be handling manure for 76 Ltd. They also noted that the earthen manure storage structure hardly changed from the other day. DNR personnel also noted manure solids and liquids on the ground between the storage structure and the confinement buildings. A total of three burn barrels were also noted at the facility.

On October 7th, the earthen manure storage structure failed to meet the minimum requirement of two feet of freeboard; however, it was only within a few inches.

On October 15th, DNR personnel conducted their final visit. There appeared to be no changes since October 7th. A majority of the grass and weeds had been removed; however, there was some grass that still need to be removed.

The Department is requesting that this matter be referred to the Attorney General's office for the multiple number of air, water and solid waste disposal violations. One of the arguments that you will hear from 76 Ltd. is that the problems have been corrected and the facility is taking steps to prevent future violations. While we appreciate that, there were still large violations that need remedial action.

Eldon McAfee, Attorney representing 76 Ltd. stated the following information. Mr. John Klein was also present.

I will start by saying, 76 Ltd. does not deny that violations occurred. John and his partners regret that it happened, but we're here today to answer questions and to point out our side of it. Our goal is not to "try" our case but I would really appreciate it if the Department would give producers, such as John the chance to sit down and talk to the Department about this case before putting it on the agenda for referral. The report itself is inaccurate it's just not the whole story. The report doesn't tell you that John and his partners contacted the DNR last April because they could tell they were going to have a problem with their basin storage before the thaw.

John Klein said that the Department staff referred us to the NRCS to apply to them for permission to apply on CRP ground. We confided with their requirements and the soil testing.

Eldon asked John to explain what went wrong.

John Klein said that we had extraordinary rains after this spring that continued to be a problem with our MMP and run-off.

Eldon McAfee said that then in September the basin ran over. 76 Ltd. truly regrets that it happened and should not have happened. They have put measures in place to keep a closer eye on the level of the basin, but that doesn't excuse what happened. You also haven't heard about the full cooperation that 76 Ltd. did. One of the violations the DNR is stating is the failure to be certified. John is not certified but the manager with John was. They were both hooking up the

equipment in an emergency situation yet the Department cited them. I believe they were in compliance with the law. They were trying to reconcile the situation and they were cited by the Department. Again, this does not excuse what happened, but they are missing facts. It would have been very beneficial if the Department would have sat down with us. Then you have the tile line situation.

John Klein said with direction from the inspector and our own judgment we needed to move our traveling irrigators in order to avoid over application in one area. Before we moved to a different spot, I walked the area, but missed a tile hole.

Eldon McAfee asked John if he is now a certified applicator.

John Klein said yes.

Eldon McAfee said that you know what the weather was like this summer. They also didn't want to over apply on CRP ground, they needed to wait for the crop to come up. It was a late fall. No excuses, just explaining the situation. But this is why he couldn't get it below the freeboard level. He did eventually get it below the level. Regarding the burn barrels, they have since been removed.

John Klein explained the photos of the composting pile. What you see are still born pigs and their after birth. They were put on top of the compost pile and then they were to be covered up. The manager understood that you have 24 hours to properly cover the dead animals, he thought he was well within the time frame.

Eldon McAfee said that they did obtain an engineer to evaluate the basin. The engineer had some basic recommendations, but overall the storage is sound but there are some issues to address with the trees. The larger ones have been removed. Mark has had questions for the engineer and the engineer has promptly responded.

Henry Marquard asked if the rain was the main issue for not being able to pump out the basin or to keep it at the minimum level.

John Klein said yes.

David Petty said that the compost pile looks fresh. Those pigs haven't been there but for a few hours.

Eldon McAfee said that he feels these issues can be addressed within the DNR.

Susan Heathcote asked why it took 27 days to meet the freeboard level?

John Klein said that our MMP only allows for a maximum amount to be applied and we applied the maximum amount. We felt we were at the level of compliance.

REFERRAL DENIED

REFERRALS TO THE ATTORNEY GENERAL – MAPLE GROVE FARMS, LLC

Kelli Book presented the following information.

The Department asks referral of Maple Grove Farms, due to their failure to submit manure management plan updates and compliance fees. Maple Grove owns several animal feeding operations in northwest Iowa and each of the animal feeding operations is required to submit an updated manure management plan and compliance fee each year.

The Ohlendorf Site is located in Plymouth County. The 2007 updates and compliance fees were due Dec. 1, 2007. On February 8, 2008, DNR Field office sent a notice of referral to Maple Grove. To date, the 2008 updates and fees have not been submitted as well.

The Maass Site is located in Plymouth County. The updated MMP and compliance fees were due June 1, 2008. A notice of the requirements were sent as well as a notice of violation. A referral letter was sent at a later date as well. To date, the MMP update and fee have not been submitted.

The Nilles Site is located in Plymouth County. The updated MMP and compliance fees were due July 1, 2008. A notice of the requirements were sent as well as a notice of violation. A referral letter was sent at a later date as well. To date, the MMP update and fee have not been submitted.

Maple Grove Facility #59056 is also located in Plymouth County. The updated MMP and compliance fees were due August 1, 2008. A notice of the requirements were sent as well as a notice of violation. A referral letter was sent at a later date as well. To date, the MMP update and fee have not been submitted.

The Gallas Site is located in Plymouth County. The updated MMP and compliance fees were due on September 1, 2008. A notice of the requirements were sent as well as a notice of violation. A referral letter was sent at a later date as well. To date, the MMP update and fee have not been submitted.

The Beaver Site is located in Plymouth County. The updated MMP and compliance fee for the facility were due on February 1, 2008. A notice of the requirements were sent as well as a notice of violation. An administrative order was issued to the facility that required them to submit their MMP within 30 days and a penalty of 3,500 dollars. The order was not appealed. To date, the MMP update, compliance fees and penalty have not been submitted.

DNR has been in contact with the Maple Grove company. Ms. Grubb with Maple Groves received the list of facilities that are overdue and what was needed. She indicated that they would get this information immediately. Based on their continued failure, we request that this matter be referred to the Attorney Generals' office. Our staff has spent a lot of hours sending letters and giving them the opportunity to come into compliance.

Motion was made by David Petty to refer Maple Grove Farms to the Attorney General's office. Seconded by Susan Heathcote. Motion carried unanimously.

REFERRED

UPDATE ON COAL ASH MANAGEMENT AT QUARRY/MINE RECLAMATION SITES

Chad Stobbe submitted the following information.

Environmental Protection Commission:
Update on Coal Ash Management at Quarry/Mine Reclamation Sites
(January 13, 2009)

- The department completed a review of solid waste regulations 4 years prior, which identified several solid waste chapters as outdated and in need of rulemaking. IAC 567 Chapter 108, titled "Beneficial Use Determinations: Solid By-Products As Resources And Alternative Cover Material" was one of those rules that was identified, however, due to a lengthy rulemaking regarding municipal solid waste landfill regulations (Chapter 113), this rulemaking was delayed.

- In the spring of 2008, the department was petitioned by the Iowa Utility Association (IUA) to revise certain provisions of Chapter 108. The most significant revisions requested were to remove all references to "fill material" and to clarify that fill projects are not beneficial use projects, as these beneficial fill activities more closely resemble landfills and should be regulated according to landfill rules. The department has specific landfill rules for coal combustion wastes (Chapter 103), but are minimal and need to be revised at the same time as the Chapter 108 revisions.

- Given the department's rulemaking plan wanted to expand the scope of the rulemaking beyond what was being proposed in the IUA's petition, the petitioner agreed to additional time in order to provide stakeholders (utilities, environmental groups, quarries, solid waste industry, etc.) with a thorough opportunity for participation and discussion prior to initiating any formal rulemaking.

- In July 2008, the department circulated a memo to stakeholders outlining the proposed amendments, including a draft version of the rule, with the request for feedback.

- In October 2008, the department circulated a "Stakeholder Comment Summary and Next Steps" memo that attempted to address the comments received. In an effort to provide access into the rulemaking process, all written comments submitted have been posted on a webpage specifically dedicated to this rulemaking (http://www.iowadnr.com/waste/policy/beneficialuse.html).

- Based on those comments, the department incorporated revisions that ultimately changed the scope of the rulemaking. It was again reiterated that the proposed amendments were not a part of any formal rulemaking, and that the department would provide another opportunity for feedback on the proposed amendments prior to initiating any formal rulemaking.

- Regarding the use of CCR for reclamation at quarries, it was apparent from the comments received that there was a strong opposition from industry regarding the additional cost of compliance in

upgrading to meet the same requirements as landfills, such as groundwater monitoring, liners, and financial assurance.

- The reoccurring theme was that due to the lack of site specific monitoring data from Iowa quarries/mines using CCR for reclamation, that the suggestion that there's an environmental impact lacks scientific backing to substantiate the proposed level of environmental regulation. While the department can document that some constituent migration is occurring at existing permitted CCR landfills, reclamation sites are not currently required to collect groundwater data.

- Based on the comments received, the department proposed incorporating rule provisions for existing quarry reclamation sites to gather site geology and groundwater monitoring data, to assess whether constituents are migrating offsite. This data would then be irrefutable and would be used to direct additional rulemaking regarding the appropriate level of environmental controls (liner, leachate collection systems, monitoring, etc.) for these sites.

Beneficial Use Fill Project Requirements

(IAC 567 Chapter 108.6 - 108.7)

Analytical Testing of Fill Material:

1) Toxicity Characteristics Leaching Procedure (TCLP, EPA Method 1311).
2) Synthetic Precipitation Leaching Procedure (SPLP, EPA Method 1312) – less than or equal to 10 times the maximum contaminant levels (MCL) for drinking water. Foundry sand and coal combustion by-products may limit the SPLP analytes to total metals for drinking water.
3) Total Metals Testing – By-product must meet the department's statewide standards for soil pursuant to IAC 567 Chapter 137. Arsenic levels shall be consistent with the statewide standards for soil or the naturally occurring (i.e. background) arsenic levels of the soil, whichever is greater. *"Statewide standards" are standards prescribed in the LRP which represent concentrations of contaminants in groundwater and soil for which normal, unrestricted exposure is considered unlikely to pose a threat to human health.*
4) The solid by-product shall produce a fill that has a pH greater than or equal to 5 and less than or equal to 12.

Site Requirements:

1) The by-product shall not be placed in a waterway, wetland or any waters of the state or extend below or within 5 feet of the high water table.
2) The by-product shall not be placed within the 100-year floodplain, unless in accordance with all local and department regulations, including IAC 567 Chapter 71.5(455B).
3) The by-product shall not be placed closer than 200 feet to a sinkhole or to a well that is being used or could be used for human or livestock water consumption.

Solid By-Product Management Plan Requirements:

1) Lists the source(s) of the solid by-product.
2) Lists procedures for periodic testing of the solid by-product to ensure that the chemical and physical composition has not changed significantly.
3) Provides a description of storage procedures including:
   - Storage location(s) and maximum anticipated inventory, including dimensions of any stockpiles.
   - Run-on and run-off controls, which may include a storm water NPDES permit.
   - Management practices to minimize uncontrolled dispersion of the solid by-product.
   - Maximum storage time, not to exceed 6 months unless authorized in writing by the department.

4) All generators shall maintain all records related to the solid by-product management plan for a minimum duration of five years and shall submit to the department within 60 days of the end of the calendar year the following information for each beneficial use project or activity:
   - The location of the project.
   - The tons of solid by-product utilized for the project.

Susan Heathcote asked what environmental groups were invited to the stakeholder work groups.

Chad Stobbe said that we sat down with folks from Plains Justice and sent the provisions out to Iowa Environmental Council, Sierra Club and posted them on our website for feedback.

Susan Heathcote asked that we keep environmental groups informed and invited as well as the Department of Public Health.

Paul Johnson said that he is concerned with fly ash problems from other states. What are their requirements for dealing with fly ash?

Chad Stobbe said that he will look into it. Iowa requires toxicity testing before disposal of fly ash in the landfill. This tests for mercury and other heavy metals.

INFORMATION

REVIEW OF REGULATORY OPTIONS FOR ADDRESSING THE VACATUR OF CAMR

Jim McGraw presented the following information:

At the October 2008 Commission meeting, the Department presented an information item proposing rule changes to remove from the state air quality rules EPA's Clean Air Mercury Rule (CAMR) provisions that the United States Court of Appeals for the District of Columbia Circuit (the D.C. Court) vacated. The D.C. Court found CAMR to be unauthorized under the federal Clean Air Act (CAA). Instead of proceeding with the rulemaking process, the Commission requested that the Department provide information regarding state regulatory options for addressing the vacatur of CAMR. This request was reiterated during the November 2008 Commission meeting.

The summary presents for the Commission's consideration possible regulatory options for addressing the federal vacatur of CAMR. The summary also includes pros and cons associated with each option and additional considerations that may be relevant in the decision making process.

The Department is recommending that option 2 be selected. As indicated in the summary, option 2 would align the state's removal of the CAMR provisions from the administrative rules with the federal vacatur of CAMR, thereby providing regulatory certainty for affected sources. Nationwide, the EPA administered cap and trade program for mercury, which was the most significant component of the CAMR provisions, no longer exists. Although removal of the CAMR provisions would remove the requirement to continue monitoring mercury emissions,

nearly all CAMR-affected units have indicated that they will continue to monitor mercury emissions.

Please see the background document for more information on the vacated CAMR provisions, the D.C. Court decision, and the impacts of the vacatur.

Based on direction provided by the Commission after their review and consideration of the options, the Department will bring a Notice to the Commission for decision at a future Commission meeting.

Regulatory Options for Addressing CAMR Vacatur

Option	Pros	Cons	Notes
1. Retain Clean Air Mercury Rule (CAMR) provisions in Iowa Administrative Code (IAC) until EPA promulgates a new rule.	-CAMR provisions can be removed from IAC at same time new EPA rules are adopted.	-Regulatory uncertainty for Electrical Generating Units (EGUs) and other stakeholders. -EGUs will have to request variances from vacated requirements. Staff time will be used to process variance requests. -EPA technical amendments for Hg monitoring have not been adopted into IAC.	-No environmental benefit gained by waiting to remove CAMR provisions from IAC. - Nationwide, EPA administered cap and trade program for Hg no longer exists.
2. Remove CAMR provisions from IAC.	-Aligns with federal rule vacatur. -Provides regulatory certainty for EGUs.	-Facilities may not continue monitoring Hg emissions.	-Nationwide, EPA administered cap and trade program for Hg no longer exists. -Nearly all CAMR-affected units have indicated they will continue to monitor Hg.
3. Remove CAMR provisions from IAC and require emissions monitoring.	-Removes CAMR cap and trade provisions. -Retains some Hg emissions monitoring.	-Adoption will require removal of reference to EPA submittal requirements. -Additional staff will be needed to QA data, review/approve plans, develop database and store data. - Technical problems with EPA monitoring methods still exist.	-Hg emissions data could be useful for future planning activities. -Unknown whether new EPA rule would have similar monitoring requirements. -EPA is not fixing current monitoring method problems.
4. Remove CAMR provisions from IAC and require emissions monitoring but set CAMR caps for Iowa as new Hg emissions limits.	-Same as Option 3. -Caps Hg emissions from Iowa EGUs.	-Same as option 3. -Connection between Iowa EGU emissions and Hg deposition in Iowa is not established. -Future federal Hg emission limits and control equipment requirements will be different and may include limits for other HAPs.	-Hg emissions data would be used to demonstrate compliance with EGU caps. However, problems with EPA monitoring methods still exist.
5. Remove CAMR provisions from IAC	-Allows EGUs to buy Hg allowances or	-Limited pool of Hg allowances could mean controls would always	-A regional cap and trade program would likely be

and adopt statewide cap and trade program.	control emissions. -Hg emissions from EGUs would be capped.	be cheaper. -Significant resources, including economics experts and IT resources, needed to administer program.	more effective. -Unknown whether other states would participate.

Additional Considerations:

1) Regardless of option selected, the state rule (567 IAC 22.3(5)) allowing modification of permits to mitigate excessive Hg deposition from a major source will be retained. This provision allows the Department to evaluate possible major source contributions to ecosystems found to have high levels of mercury deposition.

2) Mercury controls have been installed on one EGU and are still being operated despite the vacatur of CAMR. Some co-benefits from the control of NOx and SO2 emissions from the implementation of Phase I of CAIR will occur statewide at EGUs where controls have been installed for CAIR and are being operated. "Co-benefits" mean that mercury emissions will also be reduced at EGUs controlling for NOx and SO2.

3) The vacatur of the New Source Performance Standards (NSPS) for mercury emissions from coal-fired boilers (40 CFR Part 60, Subpart Da) is not impacted since 112(g) currently applies to new EGUs. Under Clean Air Act (CAA) section 112(g), if EPA has not set applicable emission limits for a category of listed hazardous air pollutant (HAP) sources, construction of a new major source or modification of an existing major source in the source category may not occur unless the Administrator (or delegated state or local agency) determines on a case-by-case basis that the unit will meet standards equivalent to maximum achievable control technology (MACT). Any EGU that has not completed construction prior to the Court mandate on March 14, 2008, may potentially be subject to case-by-case MACT under CAA section 112(g). Since EPA has delegated authority to the DNR to implement and enforce 112(g) in Iowa, construction permit staff is evaluating HAP emissions and establishing MACT for new EGUs.

4) New federal rules will likely require control of additional HAPs from EGUs, such as organic HAPs, particulate metals, and acid gases. If the state imposes mercury limits now, owners and operators of EGUs may later be required to conduct costly retrofitting of different controls than would be required for controlling mercury alone.

CAMR Background Document

CAMR Regulations

In May 2005, EPA promulgated the Clean Air Mercury Rule (CAMR). The purpose of CAMR was to permanently cap and reduce mercury emissions from coal–fired electrical steam generating units (EGUs). The first phase of CAMR was to begin in 2010. The second phase of CAMR was to begin in 2018.

With the assistance of a stakeholder workgroup, the Department chose to adopt EPA's cap and trade programs for regulating mercury emissions from EGUs. EPA subsequently approved the state's CAMR regulations into Iowa's State Implementation Plan (SIP) in 2007.

Under the CAMR cap and trade program, EPA provides the state with a "budget" of mercury allowances, which the Department then allocates to each affected coal-fired EGU. Each allowance is equal to one ounce of mercury emissions. Upon allocation of mercury allowances, coal-fired EGUs can then trade them through an EPA–managed trading program. At the end of each year, each affected EGU must hold one allowance for each ounce of mercury emitted.

CAMR was not intended to reduce emissions at specific EGUs, but instead was intended to guarantee national emissions reductions. The EGUs were allowed the flexibility to determine the most appropriate method of compliance by securing allowances, reducing emissions, or instituting some combination of these approaches.

CAMR Vacatur

The D.C. Court issued its decision to vacate CAMR on February 8, 2008, and issued the mandate making the decision final and effective on March 14, 2008. The D.C. Court's decision is available on-line at http://pacer.cadc.uscourts.gov/docs/common/opinions/200802/05-1097a.pdf

EPA will not be operating the CAMR trading program, at least not as originally planned. Other federal CAMR regulations separate from the trading program were also vacated in the D.C. Court's decision.

The vacatur of CAMR also means that section 112(g) applies to new EGUs. As part of the D.C. Court's decision to vacate CAMR, the D.C. Court found that EPA failed to follow the comprehensive de-listing process for EGUs required under section 112.

Section 112 of the CAA includes provisions to require MACT for major sources of HAP emissions in the event that EPA does issue MACT standards. Under section 112(g), if EPA has not set applicable emission limits for a category of listed HAP sources, construction of a new major source or modification of an existing major source in the source category may not occur unless the Administrator (or delegated state or local agency) determines on a case-by-case basis that the unit will meet standards equivalent to MACT. EPA has delegated authority to the Department to implement and enforce 112(g) in Iowa.

Under CAA section 112(j), if EPA fails to promulgate a standard for a listed category or subcategory by the dates established in the CAA, states must conduct a case-by-case MACT

determination for each subject source category or subcategory and include the MACT requirements in each facility's Title V Permit. However, section 112(j) does not apply to EGUs at this time because it was not among the source categories listed by EPA when it implemented section 112 and the MACT program.

Department Activities to Date

On June 19, 2008, the Department notified in writing owners and operators of CAMR-affected EGUs that they were not required to submit a CAMR permit application by the July 1, 2008, deadline. They were also notified that they were not required to comply with the upcoming mercury monitoring deadlines, including the January 1, 2009, deadline for mercury monitoring certifications. However, the Department recommended that owners and operators of CAMR-affected EGUs proceed with their mercury monitoring programs until such time as final rules to remove the CAMR-related provisions are adopted and effective in the IAC.

The Department further discussed the implications of the CAMR vacatur with stakeholders at Air Quality Client Contact meetings on August 14 and November 13, 2008. The Department also hosted a conference call with EGUs to discuss both CAMR and the Clean Air Interstate Rule (CAIR) on November 5, 2008.

Henry Marquard said that we will put this on the agenda as a decision item for next month.

Jim McGraw confirmed that the Commission was requesting that the Department present a vacatur option and a vacatur option with some type of monitoring required, for decision next month.

Henry Marquard also said the he would like to have more information about monitoring and other options. I believe that commissioners think option 3 wouldn't be a bad compromise.

Marty Stimson suggested that Commissioner Heathcote talk one on one with DNR staff. Air monitoring is a very complex issue and hard to understand. Because of the complexity of this issues, can we do a summary in layman's terms.

Jim McGraw distributed a copy a Review of Assessment Methods for Estimating Atmospheric Deposition of Mercury Compounds in Iowa to each Commissioner.

INFORMATION

FINAL RULE – CHAPTERS 22 AND 23: AIR QUALITY PROGRAM RULES – ADOPTION OF FEDERAL AIR QUALITY STANDARDS AND REVISIONS TO AIR CONSTRUCTION PERMIT REQUIREMENTS

Christine Paulson from the Air Quality bureau presented the following item.

The Department is requesting that the Commission adopt amendments to Chapter 22 "Controlling Pollution" and Chapter 23 "Emission Standards for Contaminants" of the 567 Iowa Administrative Code.

The primary purpose of the rule changes is to adopt new federal regulations affecting stationary internal combustion engines, gasoline distribution facilities and surface coating operations, and to amend the state air construction permitting requirements to better accommodate the new regulations. Additional, minor amendments to other federal regulations are also being adopted.

Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on November 5, 2008, as ARC 7306B. A public hearing was held on December 8, 2008. The Department did not receive any comments at the public hearing. The Department received two written comments before the public comment period closed on December 9, 2008.

The public comments submitted pertain to Item 1 and Item 7 and are described briefly in the rulemaking preamble for the respective items. Additionally, a public participation responsiveness summary is attached to this agenda item. The Department did not make any changes to the adopted rules from what was published in the Notice.

Over the last year, EPA finalized several new air quality regulations under two programs authorized by federal Clean Air Act (CAA), the New Source Performance Standards (NSPS) program and the National Emissions Standards for Hazardous Air Pollutant (NESHAP) program. These programs require new and existing facilities in a particular industry sector that construct and operate specific equipment to meet uniform standards for air pollutant emissions.

This rulemaking includes adoption of new federal NSPS and NESHAP impacting facilities that previously had few, if any, air quality requirements. Because of the potential impacts to small businesses and previously unregulated facilities, the Department developed implementation strategies in conjunction with the rulemaking. The strategies include cooperative efforts with University of Northern Iowa – Iowa Air Emissions Assistance Program (UNI), Iowa Department of Economic Development (IDED), the Linn and Polk County local air quality programs, and other interested associations and organizations, to provide outreach, education and compliance assistance to stakeholders. The Department's outreach efforts began in mid-2008, continued during the rulemaking process, and will continue upon final adoption of these rules.

It is hoped that these new rules in conjunction with the Department's outreach efforts will result in reductions in air toxic and other air pollutant emissions while minimizing the regulatory burden to small businesses and other affected facilities.

The specific items included in the adopted rules are summarized below. Because adoption of new NSPS and NESHAP are the primary reason for this rulemaking, these changes are paired with the items describing the complementary changes to permit requirements.

New requirements for Stationary Internal Combustion Engines (Items 1, 3, 4, 5 and 6)

New Source Performance Standards (NSPS) – Items 3 and 4

The Department is adopting new NSPS for stationary spark ignition internal combustion engines (SI engines). SI engines are typically gasoline fueled, but also include engines with spark plugs that burn other fuels. SI engines are used at power plants, industrial sources and other facilities to generate electricity and to power pumps and compressors.

The standards for new SI engines will limit emissions of NO_x, carbon monoxide (CO) and volatile organic compounds (VOC). All sizes of new stationary SI engines are covered under this NSPS. The NSPS phases in more stringent emissions requirements for engines with later manufacture dates. The standards are similar to the NSPS for stationary compression ignition (CI) engines (diesel engines) that the Department adopted in February 2007.

National Emission Standards for Hazardous Air Pollutants (NESHAP) – Items 5 and 6

The Department is adopting recent federal amendments to the NESHAP for stationary reciprocating internal combustion engines (RICE). The amendments include standards to limit hazardous air pollutants (HAP), or air toxics emissions, from new and reconstructed engines located at area sources. The amendments also include standards to regulate HAP from smaller-sized engines located at major sources.

Areas sources are usually smaller commercial or industrial operations that typically release lesser quantities of HAP. Specifically, area sources have potential emissions less than 10 tons per year (tpy) of any single HAP and less than 25 tpy of any combination of HAP. Facilities that have potential HAP emissions greater than or equal to these levels are classified as major sources of HAP.

Generally, the RICE NESHAP requires new and reconstructed engines to meet the NSPS requirements for CI or SI engines. Existing engines located at area sources are not covered under these new regulations. However, EPA has published a notice in the Federal Register stating that EPA plans to issue standards in the future for existing engines located at area sources.

Construction Permit Requirements for Small, Stationary Engines – Item 1

Currently, stationary internal combustion engines less than 400 horsepower (HP) are eligible to be exempt from the requirement to obtain a construction permit. When this exemption was originally adopted into state rules, there were no federal requirements applicable to these smaller engines. The new NSPS and NESHAP regulations require all sizes of new, modified or reconstructed engines to meet certain emissions requirements.

To address this, the Department is amending the 400 HP exemption to require submittal of a registration certifying NSPS and NESHAP compliance prior to installation of the engine. The registration will guide owners and operators of affected facilities through a series of questions that will assist them in ensuring that the engine they order and install complies with the NSPS and NESHAP, while still allowing the engine to be exempt from the requirement to obtain a construction permit. The registration will also assist the Department air quality and field office staff to ensure that affected facilities are in compliance.

New Requirements for Gasoline Distribution and Dispensing (Items 5 and 7)

NESHAP for Bulk Gasoline Distribution

The NESHAP for gasoline distribution applies to bulk gasoline facilities, such as bulk plants, bulk terminals, and pipeline breakout stations. The NESHAP will reduce VOC and HAP from gasoline vapors, including benzene emissions.

Bulk terminals and pipeline breakout stations are required to control emissions through submerged filling at tanks and loading racks and controls on gasoline storage tanks. Owners and operators of larger terminals must capture and control gasoline vapors at the loading rack.

Bulk plants have lower monthly gasoline throughputs than terminals or breakout stations. Owners and operators of bulk plants are required to control gasoline vapors by use of submerged filling at tanks and loading racks. The Department estimates that there may be 100-200 bulk plants affected by the NESHAP. However, owners and operators of bulk gasoline plants are already required to use submerged filling at tanks under existing state rules for underground storage tanks (UST) and flammable liquids.

The Department is working with Petroleum Marketers and Convenience Stores of Iowa (PMCI) to identify the affected bulk plants. The Department met with PMCI and other stakeholders on August 21 and plans to continue working closely with stakeholders.

NESHAP for Gasoline Dispensing Facilities

The second area source NESHAP being adopted affects gasoline dispensing facilities, such as gas stations. Like the NESHAP for bulk facilities, this NESHAP will reduce VOC and HAP from gasoline vapors, including benzene emissions. These standards apply to gasoline cargo tanks (trucks) and each storage tank. The NESHAP does not apply to equipment used for refueling motor vehicles (gasoline pumps).

The gasoline dispensing NESHAP requirements are based on the actual, monthly throughput of gasoline at the facility. Under the NESHAP, owners and operators of smaller facilities are required to follow specified "good management practices" (GMP) to minimize gasoline evaporation. Owners and operators of medium sized facilities are required to follow GMP and use submerged filling of gasoline tanks. Owners and operators of large facilities must employ GMP, submerged fill, and a vapor balance system during storage tank loadings.

Owners and operators of affected gasoline dispensing facilities (GDF) are already required to implement GMP and submerged fill under existing administrative rules for UST and flammable liquids. Vapor balancing is not required under existing state rules. The Department estimates that approximately 250 larger GDF will need to implement vapor balancing. However, approximately 50 of these facilities already use vapor balancing, and nearly all of the remaining 200 facilities will have until January 2011 to comply with the NESHAP requirements.

The Department has been corresponding regularly with EPA, PMCI and a number of affected facilities regarding the new requirements. The Department met with PMCI and other stakeholders on August 21st and plans to continue working closely with stakeholders.

Construction Permit Requirements for Bulk Plants and Gasoline Dispensing Facilities (GDF)
Because bulk plants and GDF that are minor sources (not Title V) previously had very few, if any, federal or state air quality requirements, the Department has not sought construction permits from these facilities. For small and medium sized GDF, compliance with current UST and flammable liquids regulations will also serve as compliance with the NESHAP. For larger GDF that will need to install vapor balance systems, the owners and operators of these facilities are generally aware of the requirements and will be working to meet the January 2011 compliance date. The Department will work with PMCI and affected facilities to assist with compliance. At this time, the Department does not plan to require air construction permits from GDF.

Because of how the NESHAP defines throughput at bulk gasoline facilities, it appears that bulk plant owners and operators will need to obtain enforceable gasoline throughput limits by January 2011 if they wish to avoid having their facilities classified as terminals. The Department estimates that nearly all of 100-200 bulk plants affected by the NESHAP do not have construction permits. At the August 21 meeting, the Department discussed a streamlined permitting strategy with stakeholders. The Department is still developing this strategy.

New Requirements for Auto body Refinishing and Miscellaneous Surface Coating (Items 2, 5 and 7)

NESHAP Requirements (Items 5 and 7)
The third area source NESHAP being adopted affects paint stripping and certain surface coating operations, including spray coating of motor vehicles and mobile equipment.

Currently, the Department is aware of only one facility that may be affected by the paint stripping provisions of this NESHAP.

The NESHAP requirements for surface coating require owners and operators of facilities that spray apply coatings containing certain "target HAP" to control HAP through a variety of means. In brief, owners and operators at affected facilities must enclose spray areas, use high efficiency paint guns, capture 98% of overspray, capture paint and solvent when cleaning, and train and certify paint operators. Owners and operators at existing facilities will have until January 2011 to either switch to coatings that do not contain the target HAP, or to comply with the NESHAP requirements. The Department estimates that 1000 minor source facilities may be subject to the NESHAP, but that many of these facility owners and operators will choose to stop using the target HAP prior to the NESHAP compliance date

The Department, in cooperation with UNI, IDED, and Linn and Polk County local air programs, hosted the first stakeholder meeting on July 15. The 30 participants received a presentation on the NESHAP and air permitting requirements, a draft guide and other outreach materials. The participants provided valuable input at this initial meeting, and the Department and UNI will be offering additional presentations and compliance assistance tools over the next 18 months.

Construction Permit Requirements (Item 2)

Currently, facilities that spray apply three (3) gallons or less of material per day are eligible for the permit by rule for spray booths (PBR). The owners or operators of PBR-eligible facilities simply complete a notification letter certifying that they meet the PBR requirements.

At the time the PBR was adopted, small spray operations were not subject to any federal air quality regulations. Under the new NESHAP, the owner or operator of any size facility that uses target HAP must comply with the NESHAP. Additionally, owners and operators that spray coat motor vehicles and mobile equipment must petition for an exemption if they choose not to use the target HAP.

To accommodate the new NESHAP requirements, the Department is amending the PBR requirements and the accompanying DNR form to require that an owner or operator certify that the facility is in compliance with or otherwise exempt from the NESHAP. The revised PBR form will guide owners and operators through a series of questions that will assist them with the NESHAP. Owners and operators of existing facilities that choose to continue using the target HAP will need to re-apply for the PBR to certify compliance prior to the NESHAP compliance date. These rule changes will assist the Department air quality and field office staff in ensuring NESHAP compliance, while still allowing smaller spray operations to use a streamlined permit.

Adoption of Additional NSPS and NESHAP amendments (Items 3 and 5)

The Department is also adopting additional, federal amendments to existing NSPS and NESHAP. These amendments consist of administrative changes, technical updates and clarifications, and are summarized in the attached Adopted and Filed rulemaking.

If the Commission approves the final rules, the final rules will be published in the Iowa Administrative Code on February 11, 2009, and will become effective on March 18, 2009.

Motion was made by Shearon Elderkin to approve the final rule – Chapters 22 and 23 as presented. Seconded by David Petty. Motion carried unanimously.

APPROVED AS PRESENTED

NOTICE OF INTENDED ACTION – CHAPTER 61 – WATER QUALITY STANDARDS (STREAM RECLASSIFICATIONS VIA USE ASSESSMENT AND USE ATTAINABILITY ANALYSES – BATCH #2)

Chuck Corell presented the following information.

The commission was informed of the Notice of Intended Action regarding proposed rulemaking to amend the recreational and warm water aquatic life use designations for **134** river and stream segments. Listed below are the stream segments that will be included in the rule. Please note this is a preliminary list and changes may be made before the Notice of Intended Action is presented for approval. With the notice, we will also make available a more detailed list of the segments that includes more information about the length of the segment, the current designated uses and

the recommend designated uses. The individual Use Assessment and Use Attainability Analyses for these segments are available (or soon will be) on the department's web site at: http://programs.iowadnr.gov/uaa/search.aspx

Recent rulemaking and 2006 legislative action have brought the DNR's water quality rules towards compliance with federal Clean Water Act requirements and U.S. Environmental Protection Agency (EPA) regulations, establishing new levels of protection for water quality. As an outcome of these efforts, all 26,000 miles of Iowa's perennial (flowing year-round) streams and intermittent streams with perennial pools are initially protected at the highest levels for recreation and warm water aquatic life uses. These actions provide initial protection for many miles of perennial streams that were previously not designated for aquatic life and/or recreational uses before.

Under these new rules, it is presumed that all perennial streams and rivers are attaining the highest level of recreation and aquatic life uses and should be protected for activities such as fishing and swimming. This concept of assigning all perennial streams the highest use designation, unless assessments show that the stream does not deserve that level of protection, is referred to as the "rebuttable presumption". Included in the federal regulations are the provisions that allow for scientific analysis of these "presumed" recreational and aquatic life uses. An integral part of implementing the new rules is verifying that a stream is capable of supporting the presumed uses.

The concept of Use Assessment and Use Attainability Analysis (UA/UAA) is being applied by the DNR as a step-by-step process to gather site-specific field data on stream features and uses. The DNR then assesses available information to determine if the "presumed" recreational and aquatic life uses are appropriate.

The DNR elected to perform a UA/UAA on any newly designated stream that receives a continuous discharge from a facility with a National Pollutant Discharge Elimination System (NPDES) permit. Prior to issuing a NPDES permit for an affected facility, the DNR must complete a UA/UAA for the receiving stream or stream network.

We have four public meetings scheduled for February. We advise the effected facilities to attend as well general public. These meetings are very informal compared to public hearings. The next batch will be coming to the Commission in June.

UA/UAA Batch #2 streams requiring rulemaking

1. Apple Creek (Linn Co.)
2. Ballard Creek (Story Co.)
3. Bear Creek (Wapello Co.)
4. Big Bear Creek (Poweshiek/Iowa Co.)
5. Big Bear Creek (Poweshiek/Iowa Co.)
6. Black Hawk Creek (Black Hawk/Grundy Co.)
7. Black Hawk Creek (Black Hawk/Grundy Co.)
8. Blue Creek (Benton/Linn Co.)
9. Brewers Creek (Hamilton Co.)
10. Brewers Creek (Hamilton Co.)

11. Brush Creek (Marshall Co.)
12. Bulger Creek (Dallas Co.)
13. Burr Oak Creek (Jefferson Co.)
14. Clear Creek (Cerro Gordo Co.)
15. Crooked Creek (Cedar Co.)
16. Crow Creek (Jefferson Co.)
17. Deep Creek (Plymouth Co.)
18. Deep Creek (Plymouth Co.)
19. Drainage Ditch #13 (Hancock Co.)
20. Drainage Ditch #4 (Wright Co.)
21. Drainage Ditch #81 (Worth Co.)
22. Dry Creek (Benton/Linn Co.)
23. Dry Creek (Linn Co.)
24. East Branch Blue Creek (Lin Co.)
25. East Nodaway River
26. Elk Run (Black Hawk Co.)
27. Elk Run (Black Hawk Co.)
28. Flint Creek (Des Moines Co.)
29. Fourmile Creek (Kossuth Co.)
30. Fourmile Creek (Union Co.)
31. Fudge Creek (Wapello Co.)
32. Granger Creek (Dubuque Co.)
33. Hartgrave Creek (Franklin/Butler Co.)
34. Hawkeye Creek (Des Moines Co.)
35. Hawkeye-Dolbee Diversion Channel (Des Moines Co.)
36. Honey Creek (Delaware Co.)
37. Indian Creek (Audobon/Shelby/Cass Co.)
38. Indian Creek (Linn Co.)
39. Indian Creek (Sac Co.)
40. Indian Creek (Sioux Co.)
41. Indian Creek (Tama Co.)
42. Little Bear Creek (Poweshiek Co.)
43. Little Cedar River (Chickasaw Co.)
44. Little Cedar River (Chickasaw/Floyd/Mitchell Co.)
45. Little Cedar River (Mitchell Co.)
46. Little Flint Creek (Des Moines Co.)
47. Little Maquoketa River (Dubuque Co.)
48. Little Walnut Creek (Appanoose Co.)
49. Lutes Creek (Marshall Co.)
50. Marvel Creek (Adair Co.)
51. Mosquito Creek (Pottawattamie Co.)
52. Mosquito Creek (Pottawattamie/Harrison/Shelby Co.)
53. Mud Creek (Benton Co.)
54. Mud Creek (Polk Co.)
55. Murray Creek (O'Brien Co.)
56. Neola Creek (Pottawattamie Co.)
57. North Timber Creek (Marshall Co.)
58. Orange City Slough (Sioux Co.)
59. Platte River
60. Plum Creek (Delaware Co.)

61. Plum Creek (Delaware Co.)
62. Plum Creek (Delaware Co.)
63. Sewer Creek (Jasper Co.)
64. Shoal Creek (Appanoose Co.)
65. Sixmile Creek (Sioux Co.)
66. Snipe Creek (Marshall Co.)
67. South Timber Creek (Marshall Co.)
68. Spring Creek (Franklin Co.)
69. Spring Creek (Franklin Co.)
70. Spring Creek (Franklin Co.)
71. Squaw Creek (Franklin Co.)
72. Squaw Creek (Franklin Co.)
73. Squaw Creek (Linn Co.)
74. Stony Creek (Clay Co.)
75. Sugar Creek (Keokuk Co.)
76. Timber Creek (Marshall Co.)
77. Twelvemile Creek (Union Co.)
78. Unnamed Creek (#1) (City of Atkins)
79. Unnamed Creek (#1) (City of Brighton)
80. Unnamed Creek (#1) (City of Elkhart)
81. Unnamed Creek (#1) (City of Milo)
82. Unnamed Creek (#1) (HWH Company)
83. Unnamed Creek (#1) (Lakewood Estates MHP)
84. Unnamed Creek (#1) (Little Sioux Corn Processing)
85. Unnamed Creek (#1) (Missouri Valley Energy - Exira)
86. Unnamed Creek (#1) (Missouri Valley Energy - Exira)
87. Unnamed Creek (#1) (Siouxland Energy)
88. Unnamed Creek (#2) (City of Atkins)
89. Unnamed Creek (#2) (City of Brighton)
90. Unnamed Creek (#2) (City of Cincinnati)
91. Unnamed Creek (#2) (City of Elkhart)
92. Unnamed Creek (#2) (City of Hedrick)
93. Unnamed Creek (#2) (City of Middletown)
94. Unnamed Creek (#2) (City of Milo)
95. Unnamed Creek (#2) (Oak Hills Subdivision)
96. Unnamed Creek (aka Bull Ditch)
97. Unnamed Creek (aka Johnson's Creek)
98. Unnamed Creek (Bulk Petroleum)
99. Unnamed Creek (Chantland-PVS Company)
100. Unnamed Creek (City of Carroll)
101. Unnamed Creek (City of Creston WWTP)
102. Unnamed Creek (City of Earlville)
103. Unnamed Creek (City of Hedrick)
104. Unnamed Creek (City of Hills)
105. Unnamed Creek (City of Huxley)
106. Unnamed Creek (City of Malvern)
107. Unnamed Creek (City of Remsen)
108. Unnamed Creek (City of Rickardsville)
109. Unnamed Creek (City of Sioux Center)
110. Unnamed Creek (City of Sully)

111. Unnamed Creek (Corn Belt Power)
112. Unnamed Creek (DNR Viking Lake)
113. Unnamed Creek (Echo Valley MHP #2)
114. Unnamed Creek (Ecosystems Inc.)
115. Unnamed Creek (Heartland Lysine)
116. Unnamed Creek (IAAP)
117. Unnamed Creek (IAMU)
118. Unnamed Creek (John Deere Davenport Works)
119. Unnamed Creek (John Deere Engineering Center)
120. Unnamed Creek (Magellan Pipeline - Johnson Co.)
121. Unnamed Creek (McCreary Community Building)
122. Unnamed Creek (Siouxpreme Packing)
123. Unnamed Creek (Stacyville COOP Creamery)
124. Unnamed Creek (Tri-Center Community School)
125. Unnamed Creek (Wells Dairy - North Plant)
126. Unnamed Creek (Wells Dairy Mill Plant)
127. Waterman Creek (O'Brien Co.)
128. Waugh Branch (Keokuk Co.)
129. West Branch Blue Creek (Benton Co.)
130. West Branch Floyd River
131. Willow Creek (Cerro Gordo Co.)
132. Willow Creek (Cerro Gordo Co.)
133. Willow Creek (Cerro Gordo Co.)
134. Willow Creek (Cerro Gordo Co.)

Henry Marquard asked that all of the information be distributed before the meeting.

INFORMATION

FINAL ADOPTION – CHAPTER 69 – ONSITE WASTEWATER TREATMENT DISPOSAL SYSTEMS, NPDES GENERAL PERMIT #4 AND CHAPTER 64, "WASTEWATER CONSTRUCTION AND OPERATION PERMITS"

Chuck Corell, Water Quality Bureau Chief presented the following information.

The Commission is requested to approve the amendments to Chapter 69, "Onsite Wastewater Treatment and Disposal Systems". The amendments to Chapter 69 include the addition of a time of transfer section as required by Senate File 261, the addition of new technologies and technology specification updates, and renewal of NPDES General Permit #4 for discharging onsite systems. IAC 567-Chapter 64.15 will change to reflect the new effective dates of the NPDES General Permit #4.

Three public hearings were held on December 2, 3, and 4, 2008, in Des Moines, Iowa City and Ft. Dodge respectively. Written comments were received through December 5, 2008. Thirty persons or groups provided oral or written comments on the proposed amendments. The responsiveness summary addresses all of the comments received.

The following is a summary of the items that have been changed based on comments received:

- The time of transfer inspector disciplinary action section, taken from Chapter 82, "Water Well Contractor Certification", was replaced with the more up to date language used in Chapter 81, "Water and Wastewater Operator Certification".
- The effective date of time of transfer inspections was added, July 1, 2009, since it will be after the effective date of these rules.
- The dates used for continuing education requirements for time of transfer inspectors were slightly modified to coincide with other similar dates used in the Operator Certification database.
- Language was added to the continuing education section for time of transfer inspectors to exempt newly certified inspectors from having to earn continuing education credits in a shorter period than two years because of the date newly certified.
- Noncompliance with child support language was added to the time of transfer inspector certification requirements.
- Changes to the sizing of chambers were removed and the current sizing requirements were retained. Expanded polystyrene aggregate is to be sized similarly.
- Chamber sizing requirements were changed to ensure chambers of sufficient height are used to approximate a conventional soil absorption trench.
- The definition of drainage ditch was removed.
- The definition of expanded polystyrene aggregate was changed to exclude a proprietary manufacturing process.
- A soils and vegetative cover section was added to the at-grade soils absorption system section. A requirement to divert surface water was also added.
- The phrase "if applicable" was added to each discharging systems section in the effluent sampling subsection to clarify which systems require sampling.

The Commission is requested to approve this Final Rule.

Motion was made by Susan Heathcote to approve the final adoption as presented. Seconded by Shearon Elderkin. Motion carried unanimously.

APPROVED AS PRESENTED

NOTICE OF INTENDED ACTION – CHAPTER 65 – DEFINITIONS AND REGULATIONS PERTAINING TO NPDES PERMITS

Gene Tinker with the Animal Feeding Operations section presented the following information.

The Commission is requested to grant permission to proceed with rulemaking and publish a Notice of Intended Action to amend 567 Iowa Administrative Code Chapter 65 – Animal Feeding Operations. The purpose of the amendments is to make corrections so the administrative rules are equivalent to the Code of Iowa and consistent with federal law. The proposed corrections are made to definitions, land application practices to prevent environmental

damage and nutrient management plan requirements with associated phosphorus index implementation. In addition, changes are made where the rules indicated specific dates which are now past.

Public hearings will be held across the state on March 3rd, 4th and 5th. The comment period opens tomorrow if approved today.

Most of the operations that would be affected by this rule package would be the cattle operations. Therefore, I checked with the Iowa Cattlemen's Association to see what they would like to have for hearings. DNR Field staff recommended the four locations. (Spencer, Atlantic, Cedar Rapids and Des Moines)

Commissioners and staff discussed how the proposed amendments correlate with other animal feeding operation rules.

David Petty expressed his concerns for the specific dates listed and how they will affect farmers needing to apply manure if the weather is cooperative. It puts limitations on farmers using their best judgment to do the right thing.

Ed Tormey gave a brief update on EPA's review of the NPDES de-delegation petition including the state's compliance with the federal conflict of interest provision.

Motion was made by Susan Heathcote to approve the NOIA – Chapter 65 as presented. Seconded Marty Stimson. Roll call vote went as follows: David Petty – nay; Shearon Elderkin – aye; Paul Johnson – aye; Marty Stimson – aye; Gene Ver Steeg – aye; Sue Morrow – aye; Susan Heathcote – aye; Henry Marquard – aye. Motion carried.

APPROVED AS PRESENTED

ANNUAL EPC REPORT TO THE LEGISLATORS

Commissioners went through the report and made final changes. Lisa Nissen will update the recent version and send to each of the Commissioners for distribution at tomorrow's legislative breakfast.

A copy of the Annual EPC Report to the Legislators is posted on http://www.iowadnr.gov/epc/index.html

Motion was made by Henry Marquard to approve the recommended changes to the annual report. Seconded by Shearon Elderkin. Motion carried unanimously.

APPROVED

DRAFT AMENDMENTS TO 65.10(5); CONSTRUCTION PERMIT "DEMAND FOR HEARING" PROCEDURES

Randy Clark, DNR Attorney presented the following information.

At the October, 2008 meeting, the Commission requested that the Department's Legal Services Bureau prepare draft amendments to rules regarding construction permit "demand for hearing" procedures. The draft amendments to subrule 65.10(5) are highlighted in yellow.

As requested by the Commission, the draft amendments address the role of Department staff, document exchange requirements, burden of proof and additional time for the Commission to provide a written statement of the reasons for a decision. In addition, the draft amendments include an option for the Commission to appoint a review committee of not more than four Commissioners to consider an application prior to the Department's preliminary determination and make a recommendation to the Commission in the event of a demand for hearing.

65.10(5) *Determination by the department.* The department must receive the county board of supervisors' comments or evaluation for approval or disapproval of an application for a construction permit not later than 30 days following the applicant's delivery of the application to the department. Regardless of whether the department receives comments or an evaluation by a county board of supervisors, the department must render a determination or a preliminary determination to approve or disapprove an application for a construction permit within 60 days following the applicant's delivery of an application to the department. However, the applicant may deliver a notice requesting a continuance. Upon receipt of a notice, the time required for the county or department to act upon the application shall be suspended for the period provided in the notice, but for not more than 30 days after the department's receipt of the notice. The applicant may submit more than one notice. However, the department may terminate an application if no action is required by the department for one year following delivery of the application to the board. The department may also provide for a continuance when it considers the application. The department shall provide notice to the applicant and the board of the continuance. The time required for the department to act upon the application shall be suspended for the period provided in the notice, but for not more than 30 days. However, the department shall not provide for more than one continuance. If review of the application is delayed because the application is incomplete, and the applicant fails to supply requested information within a reasonable time prior to the deadline for action on the application, the permit may be denied and a new application will be required if the applicant wishes to proceed. If the commission has appointed a review committee as provided in 65.10(9) the department shall provide information requested by the committee regarding the application and the status of the department's review. The review committee may request that the department provide notice of a continuance, if available, and consider additional issues before rendering a preliminary determination.

The department will approve or disapprove an application as follows:

a. If the county board of supervisors does not submit a construction evaluation resolution to the department, fails to submit an adopted recommendation, submits only comments, or fails to submit comments, the department shall approve the application if the application meets the requirements of this chapter ~~and~~, Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459. The department will disapprove the application if it does not meet such requirements.

b. If the board of supervisors for the county in which the confinement feeding operation is proposed to be constructed has filed a county construction evaluation resolution and submits an adopted recommendation to approve the construction permit application, which may be based on a satisfactory rating produced by the master matrix, to the department, the department shall preliminarily approve an application for a construction permit if the department determines that the application meets the requirements of this chapter ~~and~~, Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions

applicable to permits, certifications or manure management plans required by Iowa Code chapter 459. The department shall preliminarily disapprove an application that does not satisfy the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459 regardless of the adopted recommendation of the board of supervisors. The department shall consider any timely filed comments made by the board as provided in this subrule to determine if an application meets the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459.

c. If the board submits to the department an adopted recommendation to disapprove an application for a construction permit that is based on a rating produced by the master matrix, the department shall first determine if the application meets the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459. The department shall preliminarily disapprove an application that does not satisfy the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459 regardless of any result produced by using the master matrix. If the application meets the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459, the department shall conduct an independent evaluation of the application using the master matrix. The department shall preliminarily approve the application if it achieves a satisfactory rating according to the department's evaluation. The department shall preliminarily disapprove the application if it produces an unsatisfactory rating regardless of whether the application satisfies the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459. The department shall consider any timely filed comments made by the board as provided in this subrule to determine if an application meets the requirements of this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459.

65.10(6) *Departmental notification of permit application decision.* Within three days following the department's determination or preliminary determination to approve or disapprove the application for a construction permit, the department shall deliver a notice of the decision to the applicant.

a. If the county board of supervisors has submitted to the department an adopted recommendation for the approval or disapproval of a construction permit application, the department shall notify the board of the department's preliminary decision to approve or disapprove the application at the same time. For a preliminary decision to approve an application, the notice shall consist of a copy of the draft construction permit. For a preliminary decision to disapprove an application, the notice shall consist of a copy of the department's letter of preliminary denial. The preliminary decision to approve or disapprove an application becomes final without further proceedings if neither the county board of supervisors nor the applicant demands a hearing before the commission or appeals pursuant to 65.10(7) and 65.10(8).

b. If the county board of supervisors has not submitted to the department an adopted recommendation for the approval or disapproval of a construction permit application, the department notice shall include the construction permit or letter of denial. The applicant may appeal the permit or denial as provided in 65.10(8).

65.10(7) *County demand for hearing.* A county board of supervisors that has submitted an adopted recommendation to the department may contest the department's preliminary decision to approve or disapprove an application by filing a written demand for a hearing before the commission. Due to the need for expedited scheduling, the county board of supervisors shall, as soon as possible but not later than 14 days following receipt of the department's notice of preliminary decision, notify the chief of the department's water quality bureau by facsimile transmission to (515)281-8895 that the board intends to file a demand for hearing. The demand for hearing shall be mailed to Director, Department of Natural Resources, Henry A. Wallace Building, 502 East Ninth Street, Des Moines, Iowa 50319, and must be postmarked within 14 days following receipt of the department's notice of preliminary decision. The demand shall include a statement providing all reasons why the application should be approved or disapproved according to legal requirements in this chapter ~~and,~~ Iowa Code chapter ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459; legal briefs and any other documents to be considered by the commission or a statement indicating that no other documents will be submitted for consideration by the commission; and a statement indicating whether oral argument before the commission is desired.

65.10(8) *Applicant demand for hearing; appeal.* The applicant may contest the department's decision or preliminary

decision to approve or disapprove an application by filing a written demand for a hearing. The applicant may elect to have the hearing conducted as a contested case before an administrative law judge pursuant to 561—Chapter 7, or before the commission pursuant to subrule 65.10(9). The demand for hearing shall indicate which procedure the applicant elects.

a. Applicant demand for hearing before the commission. Due to the need for expedited scheduling, the applicant shall, as soon as possible but not later than 14 days following receipt of the department's notice of preliminary decision, notify the chief of the department's water quality bureau by facsimile transmission to (515)281-8895 that the applicant intends to file a demand for hearing; however, in cases in which the applicant would not demand a hearing unless the county demanded one, the applicant will be allowed an additional three working days to file a demand. It is the responsibility of the applicant to communicate with the department to determine if a county demand has been filed. The demand for hearing shall be mailed to Director, Department of Natural Resources, Henry A. Wallace Building, 502 East Ninth Street, Des Moines, Iowa 50319, and must be postmarked within 14 days following receipt of the department's notice of preliminary decision, or such longer time as authorized in this paragraph. The demand shall include a statement providing all reasons why the application should be approved or disapproved without specified conditions according to legal requirements in this chapter ~~and~~, Iowa Code chapter ~~455B~~ ~~455B~~ 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459; legal briefs and any other documents to be considered by the commission or a statement indicating that no other documents will be submitted for consideration by the commission; and a statement indicating whether oral argument before the commission is desired. If both the applicant and a county board of supervisors are contesting the department's preliminary decision, the applicant may request that the commission conduct the hearing on a consolidated basis.

b. Applicant contested case appeal. The applicant may appeal a permit or letter of denial according to the contested case procedures set forth in 561—Chapter 7; however, if the county has demanded a hearing pursuant to subrule 65.10(7), a demand for hearing must be filed within the time frames set forth in paragraph *"a."* If both the applicant and a county board of supervisors are contesting the department's preliminary decision, the applicant may request that the hearings be consolidated and conducted as a contested case.

65.10(9) *Decision by the commission.* The director shall schedule a hearing on a demand pursuant to 65.10(7) or 65.10(8)*"a"* for consideration at the next regular meeting of the commission and notify the county board of supervisors and the applicant of the time and place. However, if the next regular meeting of the commission will take place more than 35 days after receipt of the demand for hearing, the director shall schedule a special in-person meeting or an electronic meeting of the commission pursuant to Iowa Code section 21.8. The director shall provide the applicant with copies of all documents submitted by the county board of supervisors and a copy of the department's file on the permit application within three days after receipt of the county board of supervisors' comments. The applicant may submit responses or other documents for consideration by the commission postmarked or hand-delivered at least ~~14~~ 7 days prior to the date of consideration by the commission. Consideration by the commission is not a contested case. Oral participation before the commission will be limited to time periods specified by the commission and, unless otherwise determined by the commission, to argument by representatives from the county board of supervisors, the applicant and the department. The party filing a demand for hearing opposing the department's preliminary decision shall have the burden to establish by a preponderance of the evidence that the preliminary decision does not comply with legal requirements in this chapter, Iowa Code chapter 459, orders issued by the department, and terms and conditions applicable to permits, certifications or manure management plans required by Iowa Code chapter 459. In rendering its decision the commission shall only consider documents and oral statements provided by representatives from the county board of supervisors, the applicant and the department. Representatives of the department shall not advocate for either the county board of supervisors or the applicant but may summarize the basis for the department's preliminary decision and respond to questions by members of the commission. The commission may also consider the recommendation of a review committee consisting of not more than 4 commission members appointed by the commission to evaluate the technical aspects of applications and the adopted recommendations by county boards of supervisors. The decision by the commission shall be stated on the record and shall be final agency action pursuant to Iowa Code chapter 17A. Within 30 days of the decision the commission may file a written statement of the basis for the decision. If the commission reverses or modifies the department's decision, the department shall issue the appropriate permit or letter of denial to the applicant. The letter of decision shall contain the reasons for the action regarding the permit.

Susan Heathcote suggested that a sub-committee of Commissioners be appointed to discuss these changes and make suggestions to the Department.

Henry Marquard said that his intent was to get clarification and an outline of hearing procedures. I also believe that the Commission has authority outside of Iowa Code Chapter 459.

Commissioners went on to discuss and ask questions about their authority regarding animal feeding operations, the department evaluation rule and hearing procedures.

INFORMATION

MONTHLY REPORTS

Wayne Gieselman, Division Administrator, Environmental Protection Division, presented the following items.

The following monthly reports are enclosed with the agenda for the Commission's information and have been posted on the DNR website under the appropriate meeting month: http://www.iowadnr.com/epc/index.html

1. Rulemaking Status Report
2. Variance Report
3. Hazardous Substance/Emergency Response Report
4. Manure Releases Report
5. Enforcement Status Report
6. Administrative Penalty Report
7. Attorney General Referrals Report
8. Contested Case Status Report
9. Waste Water By-passes Report

INFORMATION

GENERAL DISCUSSION

Wayne Gieselman briefly discussed the recent budget cuts and its impact to the Environmental Services Division.

Director Leopold distributed the following information:

2009 Department of Natural Resources Proposed Legislation
Environmental Services Division

1. Underground Storage Tank Program Funding

There is an annual tank management fee of $65 paid by owners and operators of underground storage tanks of which the DNR receives 23% of the approx. $550,000 collected annually. Under Iowa Code

section 455B.479, 77% of the annual fees is transferred to the Iowa Comprehensive UST Fund Board. Since 2006, the UST Fund Board and the DNR have entered into a 28E agreement to provide the transfer of the 77% of fees to the DNR for administration of the UST operations and leak prevention program. Basically this proposal is for the DNR to retain 100% of the tank management fee that it collects to provide ongoing funding for the UST program.

2. Engine Idle Reduction Program

This proposal would establish a new policy for engine idling. According to an EPA model state idling law paper, approx. 15 states and dozens of local jurisdictions have idling laws. Since Iowa has areas of the state likely to violate federal air quality standards for particulate matter, the reduction of idling would help to reduce particulate matter (pm) levels statewide. MO is currently proposing a heavy duty diesel idle reduction program.

3. Imposition of State Tonnage Fee for Solid Waste Disposal

This is a 2 part proposal removing the state tonnage fee exemption for construction and demolition landfills and imposing the tonnage fee on all wastes passing through transfer stations that will not be disposed of at an Iowa landfill.

4. Residential Burning Ban in Cities

This proposal is to establish a phased-in ban on the burning of residential waste (household trash and landscape waste) in and near municipalities. The phase-in will start in calendar year 2010 for cities with a population of 2500 or greater and will apply to all cities beginning in calendar year 2013.

5. Increase the Cap for Public Water Supply Program Fees

The proposal is to raise the statutory cap on public water supply fees from $350,000 to $1 million to allow for the Department, through rulemaking, to increase fees as needed to support the Drinking Water Program. The current cap was established in 1995 and does not take into account increased additional federal requirements and increasing program costs. Adequate funding is being sought to ensure that DNR can continue to conduct EPA-required elements; that operating permits are issued in a timely manner and that technical assistance remains available to public water supplies, particularly small systems, to help them comply with regulations and resolve issues within their systems.

INFORMATION

NEXT MEETING DATES

February 10, 2009 Meeting in Urbandale
March 16, 2009 Tour of the Clipper Wind Farm
March 17, 2009 Meeting in Cedar Rapids

ADJOURNMENT

With no further business to come before the Environmental Protection Commission, Chairperson Henry Marquard adjourned the meeting at 5:40 p.m., Tuesday, January 13, 2009.

_____

Richard A. Leopold, Director

_____

Henry Marquard, Chair

INDEX

John

MidAmerican ENERGY
OBSESSIVELY, RELENTLESSLY *AT YOUR SERVICE*®

Testimony of MidAmerican Energy Company

Before the
Iowa Environmental Protection Commission
January 13, 2009

Rescission of the Clean Air Mercury Rule from the Iowa Administrative Code

- During today's meeting, DNR staff will be presenting several regulatory options for addressing the vacatur of the Clean Air Mercury Rule (CAMR).

- MidAmerican Energy Company encourages the Environmental Protection Commission to **adopt Option 2** and ***rescind the Clean Air Mercury Rule provisions from the Iowa administrative rules by amending 567 IAC Chapters 23, 25, and 34.***

- Continued compliance with the vacated CAMR is not possible and places both regulated entities and the Iowa DNR at risk of agency and/or third party enforcement actions.

- Imposing these current obligations on MidAmerican facilities would result in the inability to achieve compliance through no fault or negligence on the part of MidAmerican.

- At its October 14, 2008 meeting, the EPC deferred action on the DNR's Notice of Intended Action to rescind the CAMR provisions.

- MidAmerican believes it is necessary and appropriate to remove from the state air quality rules the CAMR regulations for the following reasons:

    - The U.S. Court of Appeals for the District of Columbia Circuit has original jurisdiction over appeals from federal agency rules, including those promulgated by the U.S. Environmental Protection Agency. The court's rulings vacating the CAMR are currently on appeal but have not been stayed. Therefore, the CAMR can not be implemented by the EPA, by the state of Iowa, or by any other state.

    - Mercury monitors are in place for all of MidAmerican's coal units. However, the monitors have not been certified (RATA) to collect valid compliance data. These monitors <u>can not be certified</u> because there is no approved standard by which to certify the mercury monitors. In addition, via letter dated June 19, 2008, the DNR communicated to regulated

entities that as a result of the CAMR vacature, the January 1, 2009 certification requirement is no longer in place.

- The accuracy of the mercury monitoring systems in a utility stack emissions measurement setting has considerable room for improvement. MidAmerican's experience has shown that significant differences between the Method 30B measurements (sorbent trap) and the mercury continuous emission monitor (CEMS) exist. The CEMS results are erratic and do not line up with actual Method 30B test results. Large unexplained swings in the measured stack mercury concentration have been observed.

- To date, no CAMR compliance allowances have been allocated.

- Concern was expressed by several EPC commissioners at the October 14, 2008 meeting that rescinding these vacated federal regulations would unduly harm the environment and jeopardize the public health of Iowa citizens.

- MidAmerican wants to address these concerns by highlighting that we as a company are committed to operating in an environmentally responsible manner that is protective of public health and the environment.

- This commitment has been demonstrated in the near-term investment of **over $400 million in significant capital projects** to reduce and monitor emissions from its coal-fueled electric generating units.

- Specific to mercury, the following investments have been made:

  - The Walter Scott Energy Center Unit 4 was among the first entities in the United States to install controls to reduce mercury emissions. Prior to the promulgation of the now vacated CAMR, MidAmerican committed to the installation of an activated carbon injection system at the Walter Scott Energy Center Unit 4 and continues to operate that system.

  - Continuous emissions monitors for mercury have been installed at all of MidAmerican's coal-fueled facilities.

  - Additional mercury controls are planned for the Walter Scott Energy Center Unit 3 and Louisa Generating Station. Further, the completed addition of a scrubber and baghouse at Louisa Generating Station and the ongoing addition of a scrubber and baghouse at the Walter Scott, Jr. Energy Unit 3 have ancillary benefits of reducing mercury emissions (in addition to SO_2 and particulate) and position these units to make significant reductions in mercury emissions.

- These projects were voluntarily accelerated in advance of the compliance requirements of CAMR and the **control equipment will continue to be operated *regardless*** of the final outcome of appeals in the CAMR litigation.

- **In closing, MidAmerican requests that the EPC adopt DNR's proposed option 2 and rescind the vacated CAMR provisions as currently reflected in the Iowa regulations at 567 IAC 23.1(2)(z), 23.1(4), 23.1(5)(d), 25.3, and 34.2 through 34.308, including applicable tables, and all other references to requirements originating under CAMR.**

- MidAmerican would like to weigh in on one additional matter.

- MidAmerican is aware that amendments to the regulation and beneficial use of coal combustion residue are being considered by the DNR and will be discussed during today's meeting. MidAmerican would be pleased to answer any questions that the commission and DNR has about our coal combustion residue and product management and to participate in any advisory committee formed.

www.plainsjustice.org

January 8, 2009

Richard Leopold, Director
Iowa Department of Natural Resources
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319-0034

Re: Iowa Administrative Code Chapter 567-108, "Beneficial Use Determinations: Solid By-Products as Resources and Alternative Cover Material"

Dear Director Leopold:

Plains Justice, Iowa Chapter of Physicians for Social Responsibility, Environment Iowa, Community Energy Solutions, Iowa Environmental Council, Union of Concerned Scientists, and Iowa Citizens for Community Improvement write to request that the Iowa Department of Natural Resources (DNR) rethink its decision to postpone the rulemaking process for Iowa Administrative Code Chapter 567-108. We respectfully request that DNR take the following action before making a decision about the future rulemaking process:

1. Expand the stakeholder process to include, at minimum, representatives of public health and environmental organizations and agencies;
2. Provide statewide public notice of the July 2008 Chapter 567-108 revisions;
3. Take additional public comment on the July 2008 Chapter 567-108 revisions; and
4. Hold public hearings in counties with quarry or mine coal combustion waste fill sites.

A significant proportion of coal combustion waste disposed of annually in Iowa is currently being dumped in unlined quarries that pose a threat of groundwater contamination demonstrated by contamination at similar sites in other states as well as elevated contaminant levels in monitoring wells at coal combustion waste sanitary landfill sites in Iowa (*see* Plains

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Justice, *Iowa Coal Combustion Waste Disposal* (November 2007)). The unlined sites include: Lee Crawford Quarry (Linn County), Waterloo South Quarry (Black Hawk County), Boone County Quarry, and Linwood Mining site (Scott County). These sites are adjacent to residential areas and rural water sources, and are operating without groundwater monitoring and without financial guarantees in case of contamination. At least one site is operating with a variance to allow disposal of waste with heavy metal concentrations in excess of state soil quality standards. Perhaps because of its lax regulation of this waste stream, Iowa is the recipient of coal combustion waste from several neighboring states (including Wisconsin, which tightened its regulations after contamination incidents) and as far away as Indiana. The July 2008 Revision of Chapter 567-108 does not allow coal combustion waste to be disposed in quarry fill sites without meeting the requirements of IAC Chapter 567-103, "Sanitary Landfills: Coal Combustion Residue," which was slated for revision and amendment after the Chapter 567-108 changes were finalized. This is a necessary but insufficient improvement in Iowa's coal combustion waste disposal regulation.

It is imperative that Iowans be allowed to comment on DNR's proposal to suspend the revision of Chapter 567-108. Coal combustion waste is currently disposed of throughout the state without monitoring and recordkeeping requirements. By re-releasing the July 2008 Revision for a statewide public hearing and comment period before making a decision regarding the Chapter 567-108 rulemaking, DNR can ensure that "human health, safety and the environment" are considered along with industry concerns about cost. Before indefinitely shelving the Chapter 567-108 rulemaking process in favor of a wholly insufficient voluntary monitoring phase, please notify Iowans and give us a chance to be heard.

Thank you for your consideration.

Sincerely,

Nicole Shalla
Staff Attorney

On Behalf of: Plains Justice, Iowa Chapter of Physicians for Social Responsibility, Environment Iowa, Community Energy Solutions, Iowa Environmental Council, Union of Concerned Scientists, and Iowa Citizens for Community Improvement.

Cc: Governor Chet Culver
Chad Stobbe
Henry Marquard, Chair, Environmental Protection Commission

Chad Stobbe

Environmental Protection Commission:
Update on Coal Ash Management at Quarry/Mine Reclamation Sites
(January 13, 2009)

- The department completed a review of solid waste regulations 4 years prior, which identified several solid waste chapters as outdated and in need of rulemaking. IAC 567 Chapter 108, titled "Beneficial Use Determinations: Solid By-Products As Resources And Alternative Cover Material" was one of those rules that was identified, however, due to a lengthy rulemaking regarding municipal solid waste landfill regulations (Chapter 113), this rulemaking was delayed.

- In the spring of 2008, the department was petitioned by the Iowa Utility Association (IUA) to revise certain provisions of Chapter 108. The most significant revisions requested were to remove all references to "fill material" and to clarify that fill projects are not beneficial use projects, as these beneficial fill activities more closely resemble landfills and should be regulated according to landfill rules. The department has specific landfill rules for coal combustion wastes (Chapter 103), but are minimal and need to be revised at the same time as the Chapter 108 revisions.

- Given the department's rulemaking plan wanted to expand the scope of the rulemaking beyond what was being proposed in the IUA's petition, the petitioner agreed to additional time in order to provide stakeholders (utilities, environmental groups, quarries, solid waste industry, etc.) with a thorough opportunity for participation and discussion prior to initiating any formal rulemaking.

- In July 2008, the department circulated a memo to stakeholders outlining the proposed amendments, including a draft version of the rule, with the request for feedback.

- In October 2008, the department circulated a "Stakeholder Comment Summary and Next Steps" memo that attempted to address the comments received. In an effort to provide access into the rulemaking process, all written comments submitted have been posted on a webpage specifically dedicated to this rulemaking (http://www.iowadnr.com/waste/policy/beneficialuse.html).

- Based on those comments, the department incorporated revisions that ultimately changed the scope of the rulemaking. It was again reiterated that the proposed amendments were not a part of any formal rulemaking, and that the department would provide another opportunity for feedback on the proposed amendments prior to initiating any formal rulemaking.

- Regarding the use of CCR for reclamation at quarries, it was apparent from the comments received that there was a strong opposition from industry regarding the additional cost of compliance in upgrading to meet the same requirements as landfills, such as groundwater monitoring, liners, and financial assurance.

- The reoccurring theme was that due to the lack of site specific monitoring data from Iowa quarries/mines using CCR for reclamation, that the suggestion that there's an environmental impact lacks scientific backing to substantiate the proposed level of environmental regulation. While the department can document that some constituent migration is occurring at existing permitted CCR landfills, reclamation sites are not currently required to collect groundwater data.

- Based on the comments received, the department proposed incorporating rule provisions for existing quarry reclamation sites to gather site geology and groundwater monitoring data, to assess whether constituents are migrating offsite. This data would then be irrefutable and would be used to direct additional rulemaking regarding the appropriate level of environmental controls (liner, leachate collection systems, monitoring, etc.) for these sites.

Beneficial Use Fill Project Requirements
(IAC 567 Chapter 108.6 - 108.7)

Analytical Testing of Fill Material:

1) Toxicity Characteristics Leaching Procedure (TCLP, EPA Method 1311).
2) Synthetic Precipitation Leaching Procedure (SPLP, EPA Method 1312) – less than or equal to 10 times the maximum contaminant levels (MCL) for drinking water. Foundry sand and coal combustion by-products may limit the SPLP analytes to total metals for drinking water.
3) Total Metals Testing – By-product must meet the department's statewide standards for soil pursuant to IAC 567 Chapter 137. Arsenic levels shall be consistent with the statewide standards for soil or the naturally occurring (i.e. background) arsenic levels of the soil, whichever is greater. *"Statewide standards" are standards prescribed in the LRP which represent concentrations of contaminants in groundwater and soil for which normal, unrestricted exposure is considered unlikely to pose a threat to human health.*
4) The solid by-product shall produce a fill that has a pH greater than or equal to 5 and less than or equal to 12.

Site Requirements:

1) The by-product shall not be placed in a waterway, wetland or any waters of the state or extend below or within 5 feet of the high water table.
2) The by-product shall not be placed within the 100-year floodplain, unless in accordance with all local and department regulations, including IAC 567 Chapter 71.5(455B).
3) The by-product shall not be placed closer than 200 feet to a sinkhole or to a well that is being used or could be used for human or livestock water consumption.

Solid By-Product Management Plan Requirements:

1) Lists the source(s) of the solid by-product.
2) Lists procedures for periodic testing of the solid by-product to ensure that the chemical and physical composition has not changed significantly.
3) Provides a description of storage procedures including:
   - Storage location(s) and maximum anticipated inventory, including dimensions of any stockpiles.
   - Run-on and run-off controls, which may include a storm water NPDES permit.
   - Management practices to minimize uncontrolled dispersion of the solid by-product.
   - Maximum storage time, not to exceed 6 months unless authorized in writing by the department.
4) All generators shall maintain all records related to the solid by-product management plan for a minimum duration of five years and shall submit to the department within 60 days of the end of the calendar year the following information for each beneficial use project or activity:
   - The location of the project.
   - The tons of solid by-product utilized for the project.

Quarry Reclamation Using Coal Combustion By-Products

(January 13, 2009)

State	Regulatory Agency	Regulated as Landfill	Liner Required	Groundwater Monitoring Required	Financial Assurance Required	Rule Reference	Additional Information
Minnesota	Minnesota Pollution Control Agency					Beneficial Use: 7035.2860	Was not able to reach.
Wisconsin	Wisconsin Department of Natural Resources	Yes	Yes	Yes	Yes	Solid Waste Chapters 504 and 538	Reuse of CCR is based on testing results. If project exceeds 30,000 cubic yards, it's considered a large project and requires public notice. They've allowed side slope stabilization in quarries with CCR, but a quarry completely filled with CCR is regulated as a landfill.
Illinois	Illinois Environmental Protection Agency	Yes	Yes	Yes	Yes	Title 35, Subtitle B, Part 816	
Missouri	Missouri Department of Natural Resources	Yes – For Utility Wastes	Yes	Yes	Yes	Title 10 CSR80 – Beneficial Use: 2.010 Utility Waste: 11.010	They've had some mine reclamations for small quarries with cement kiln dust, and only one small reclamation project CCR mixed with other by-products. Missouri does allow filling of underground mines with CCR similar to Linwood – regulated by the mining division. Industries that burn coal are not regulated as a utility (specific for generation of electricity) however, all CCR waste from these industries is disposed of in MSW LFs.
Nebraska	Nebraska Department of Environmental Quality	Yes	Yes	Yes	Yes	Title 132, Chapter 4 (Primary Requirements), Title 132, Chapter 7 (Groundwater Monitoring.)	There are currently no mine or quarry reclamation projects occurring in NE, however, if such a site was proposed, it would be regulated as a CCR landfill with applicable environmental controls.
South Dakota	South Dakota Department of Environment and Natural Resources	No	No	No	No	ARSD 74:27	Mine reclamation projects only involve the use of Lime Kiln Dust and Cement Kiln Dust, in which no liner or groundwater monitoring requirements are imposed. The only requirements involve dust control measures and cover requirements. South Dakota only has two power plants – one backhauls CCR back to a Wyoming coal mine and the other has a small monofill. The monofill has no liner installed, no financial assurance, but does require groundwater monitoring.

Quarry Reclamation Using Coal Combustion By-Products

(January 13, 2009)

Permitted Coal Combustion Residue (CCR) Landfills in Iowa:

1. Interstate Power & Light Lansing Power Station (03-SDP-05-01) – No Liner
2. Cedar Falls Utilities CCR Landfill (07-SDP-11-89) – No Liner
3. Corn Belt Power Cooperative CCR Landfill (21-SDP-04-95) – No Liner
4. Iowa Army Ammunition Plant CCR Landfill (29-SDP-03-82) – No Liner
5. Grain Processing Corporation CCR Landfill (58-SDP-03-92) – No Liner
6. Cargill Sweeteners – North America Landfill (62-SDP-04-89) – Clay Liner
7. Muscatine Power & Water CCR Landfill (70-SDP-06-82) – Clay liner in one area, unlined in another
8. Central Iowa Power Cooperative CCR Landfill (790SDP-09-91) – No Liner
9. MidAmerican Energy – Louisa Generating Station CCR Landfill (70-SDP-16-04) – No Liner
10. MidAmerican Energy – Walter Scott Jr. Energy Center (78-SDP-26-06) – Composite Liner
11. Ottumwa-Midland CCR Landfill (90-SDP-08-92) – Clay Liner
12. MidAmerican Energy – Neal North CCR Landfill (97-SDP-12-05) – No Liner
13. MidAmerican Energy – Neal South CCR Landfill (97-SDP-13-98) – No Liner

Current Quarry Reclamation & Mine Stabilization Sites in Iowa:

1. Lee Crawford Quarry Reclamation (57-SDP-23-97X) – Cedar Rapids
2. Wendling Quarries/Beneficial Tech. – Goose Lake Quarry Reclamation (23-SDP-15-03X) – Goose Lake
3. Basic Materials Corporation – Waterloo South Quarry Reclamation (07-SDP-20-02X) - Waterloo
4. Linwood Mining & Minerals/AMSCO – Subsurface Mine Stabilization (82-SDP-13-93X) - Buffalo

Closed Reclamation Sites in Iowa:

1. Violet M. Meier Gravel Pit Reclamation (closed 2004) - Boone

DesMoinesRegister.com

January 13, 2009

More tightly regulate coal-ash disposal

The Register's editorial

Iowa should more strictly regulate quarries, mines and landfills that are dumping grounds for coal ash - a byproduct of combustion at coal-fired electric power plants - by requiring state-of-the-art liners and multiple monitors to safeguard human health and the environment.

A devastating coal-ash spill in Tennessee in December renewed attention to this potential threat to drinking water, but Iowa's Department of Natural Resources already had drafted rules to tighten oversight because monitors for at least four landfills in Iowa had detected metals in groundwater nearby in 2007 and 2008. Coal ash can leach toxic substances that could cause cancer and neurological and developmental problems in people and damage aquatic life.

However, the Register's Perry Beeman reported Jan. 1 that state regulators want to shelve the proposed new rules for as long as three years, largely because of industry protests. One opponent - the Iowa Association of Business and Industry - argued in comments on the department's Web site that proposed changes regarding "beneficial use" of coal ash as fill at quarries "would create financial hardships for the businesses and citizens of the state while not providing any thoroughly examined or quantified environmental benefit."

The federal government does not regulate disposal of coal ash, though it should. Each state sets its own rules. The amount of coal ash produced in the country has risen because of greater demand for electricity and better air-pollution controls, which result in more solid waste.

Do more monitoring first, before changing rules?

Iowa's DNR is considering first conducting groundwater monitoring at the coal-ash sites that do not now have monitors to see what turns up, before taking further action.

So it comes down to this: Is existing evidence of groundwater pollution from coal-ash sites in this state and elsewhere enough reason to start putting tougher rules in place now, or should the state hold off to see what is going on specifically at the three quarries and the mine site?

Our recommendation to the Iowa Environmental Protection Commission, which meets today: Direct the DNR to move toward stricter regulation of all sites without delay.

Err on the side of protecting people and the outdoors by requiring liners and thorough monitoring at every site as soon as possible, because studies have found coal ash can contain substances such as arsenic, lead and mercury. The Baltimore Sun recently reported that a judge approved a $54 million settlement between Constellation Energy and residents of Gambrills, Md., whose drinking water was polluted by coal ash. And a 2007 U.S Environmental Protection Agency report listed 63 sites in 26 states where water was contaminated by heavy metals from coal-ash dumps, according to the New York Times.

Iowa shouldn't risk that.

Patchwork rules differ for quarries, mines vs. landfills

State environmental specialist Chad Stobbe explained that no decision has been made and that the DNR is merely considering a delay in designating all coal-ash sites as landfills. A landfill designation would mean quarry and mine sites taking coal ash would have to install at least one monitor, provide some groundwater protection (though what sort is not specified in current rules) and provide a financial guarantee of ability to close a site if contamination occurs, he said.

Iowa does not now require the three quarries and one mine site in the state used for coal ash to have liners or monitors, Stobbe said. There also are 13 landfills that take only coal ash. Each landfill must have at least one monitor, but it is not required to have liners, although four do, either clay or plastic.

Plains Justice, a public-interest environmental-law center based in Cedar Rapids, issued a report on coal ash in 2007, contending the state's coal-combustion waste regulations "pose a significant risk to human health and the environment." The chief reform the center seeks is a comprehensive monitoring system for all sites taking coal ash, said founder Carrie La Seur: "At the very minimum, it would allow us to evaluate and respond to the risks." Even at the landfills, data are insufficient, she said.

There's also an economic risk to taxpayers if contamination occurs and ash-site operators can't pay for the cleanup, she said.

Iowa law prohibits pollution of groundwater, which suggests the state could do much better in how it handles coal ash than its current inattentive approach.

Additional Facts

Learn more

To read comments by interest groups about the state's draft rules for coal ash, go to www.iowadnr.com/waste/policy/beneficialuse.html.

Opinion

The Des Moines Register

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Carolyn Washburn, Editor and Vice President
Carol Hunter, Editorial Page Editor

Linda Lantor Fandel, Deputy Editorial Page Editor
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Register Editorial

More tightly regulate coal-ash disposal

Err on side of protecting public health, outdoors

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Review of Assessment Methods for Estimating Atmospheric Deposition of Mercury Compounds in Iowa

Iowa Department of Natural Resources
Air Quality Bureau

April 24, 2006

Executive Summary

This document reviews the available tools for assessing atmospheric mercury deposition. These tools could be applied for developing more reliable statewide information on mercury deposition. In general, available methods range from identifying sources of mercury emissions in relation to water bodies and other geographic features to more sophisticated and complex methodologies such as global computer models.

Project Background

Concurrent with approval to begin the rulemaking process to adopt the U.S. Environmental Protection Agency's (EPA) Clean Air Mercury Rule (CAMR), the Environmental Protection Commission (EPC) and the Director of the Iowa Department of Natural Resources (department) requested that Air Quality Bureau staff review and report to the EPC and Director on assessment methods for estimating atmospheric mercury deposition in Iowa, with special emphasis on areas of excessive deposition, also referred to as "hot spots." Technical tools, such as computer models used to simulate air pollutant dispersion and deposition, have been applied by EPA and researchers to estimate mercury deposition. Further, while the evaluation of mercury deposition provides unique challenges, department staff has extensive skills and experience in the application of these tools for other air pollutants and those skills are generally applicable to mercury deposition analyses. This document completes that review.

Introduction

On November 21st, 2005, the department submitted for information to the EPC proposed rules designed to implement the requirements of CAMR. This action, when final, would serve to meet the state's obligation regarding national reductions in atmospheric mercury emissions from coal fired electrical generating units.

At the foundation of CAMR is a national emissions cap and trade system. This market based system establishes a cap on the total amount of mercury emissions that can be emitted from coal fired electrical generating units nationwide. Within the federal rule each state is apportioned a cap on mercury emissions from coal fired electrical generating units, and while it is at the states' discretion as to how it will meet that cap, implementation of the federal emissions trading program is the federally preferred approach and also the approach proposed for state implementation.

Emissions trading programs such as that proposed under CAMR accomplish environmental goals on a collective basis. For the purpose of CAMR, the environmental goal is a reduction in the emissions of mercury to the atmosphere from coal fired electrical generating units. As a collective goal, the requirement to reduce emissions of mercury applies to the coal fired electric generating sector in general and not any electric generating unit specifically. The decision regarding which specific electrical generating units will reduce mercury emissions is entirely left up to that industry. As the emission cap is set to a level below current emissions, and continues to decrease with time, mercury emissions must decrease. Implementing this decrease via an emissions trading program allows the industry to identify the most cost effective approach to reducing mercury emissions.

One uncertainty associated with any emissions trading program is identifying which units will be the ones to reduce emissions. Since this system is a national cap it is not necessary for any specific unit to decrease emissions, some units could increase emissions of mercury. With this uncertainty comes the concern that not all areas will see equal reductions in the deposition of mercury compounds, or that some areas of the country could experience an increase in mercury deposition. Local areas in the vicinity of a mercury source that have some measure of high mercury deposition are often referred to in the literature as "hot spots." The department prefers the use of the terminology "excessive deposition" as it more neutrally describes the status of the largely unknown environmental effects. While such an environmental result does not appear to have occurred as a result of a similar program to reduce deposition of acid rain, the concern remains a valid uncertainty.

This uncertainty was discussed by members of the commission during the November 21st, 2005, meeting, and department staff was directed to identify options for addressing excessive deposition of mercury. As a result department staff developed language for inclusion in the proposed rules that would allow the Director to modify permits to major stationary sources to mitigate excessive mercury deposition. On December 19th, 2005, the

EPC granted the department permission to proceed with a rulemaking for CAMR which included language regarding mitigation of excessive mercury deposition.

The department reviewed assessment methods for estimating atmospheric mercury deposition in Iowa at the request of the EPC and the Director. In general, the goal of this review was to perform a basic literature search to identify and bracket the appropriate application of various technical tools used in assessing atmospheric mercury deposition.

Discussed in greater detail below are five primary areas of technical specialization that could be applied to estimate atmospheric mercury deposition in Iowa. These areas are:

- Mercury source mapping
- Mercury emissions inventory
- Mercury deposition monitoring
- Regional and global scale computer modeling
- Local scale computer modeling

While a brief review of mercury health impacts is provided below, it should be noted that the focus of this review is on assessment methods for estimating the amount of mercury being deposited to the surface of the earth from the atmosphere and as such covers only the deposition portion of the mercury cycle. A more detailed assessment of the mercury cycle to develop information or estimates about what happens after atmospheric mercury is deposited on the surface of the Earth is beyond the scope of this document. Investigation of physical processes such as soil erosion and identification of non-air point sources of mercury, along with biological processes such as methylization, bioaccumulation and human exposure and effect are necessary for a complete assessment of environmental and human health effects of atmospheric mercury emissions.

Health Effects

The following discussion is adapted from The Washington Department of Ecology, **Human health Effects of Mercury Exposure,** available online at**:**
http://www.ecy.wa.gov/programs/eap/pbt/hgeffectstohealth.html

> When released into the environment, mercury can bind with bacteria in water to create such compounds as methyl-mercury. When a fish eats organisms containing these bacteria, methyl-mercury is ingested and builds up in fish tissue. If a tainted fish is eaten, the methyl-mercury is completely absorbed into tissues and organs. Eating contaminated fish is the most common route of human exposure to methylmercury.
>
> Another route of human exposure to mercury in its pure, elemental form is through breathing vapors or tiny particles. This form of mercury is difficult for

humans to digest, but over time can be absorbed by the intestines and accumulate in the liver, spleen, kidneys and bone.

Whether a person's health is affected by mercury depends on many variables, including the person's overall health and age, the chemical form of mercury and the routes of exposure: breathing vapors or tiny particles, eating contaminated fish, skin contact, and from pregnant mother to fetus. Fetuses, infants and children are especially sensitive to mercury exposure, which is believed to be a potential cause of movement and learning disabilities.

Deposition Mechanisms

There are two methods in which mercury compounds in the atmosphere are transported to surface of the earth: wet and dry deposition. Wet deposition occurs as mercury species suspended in the air are captured in rain droplets or frozen precipitation (snow) and subsequently transferred to the Earth's surface. Approximately 40-75% of the mercury entering lakes and streams in the U.S. and Canada is through wet deposition[1]. With dry deposition the pollutants settle to the earth's surface in the absence of precipitation. Dry deposition is not dependent upon precipitation events. Current thought places the percentage of total mercury deposition attributable to the dry phase at 25-60%. In summary, dry and wet deposition are essentially equally important factors in the transfer of atmospheric mercury to the surface of the earth.

[1] David Gay: Presentation at the Lake Michigan Air Directors Consortium Mercury Workshop, Rosemont, IL, February 22nd, 2006.

Source Mapping

Geographic Information Systems (GIS) may be used to overlay mercury emissions data with other geographic data available to the department. The location of mercury emissions sources may be compared to areas of interest such as lakes, highly erodable land, or other features and can be included in a superficial review of spatial patterns. Such data could be used for early identification of regions that might be representative of "background" conditions of mercury deposition or environmental indicators such as fish tissue concentrations.

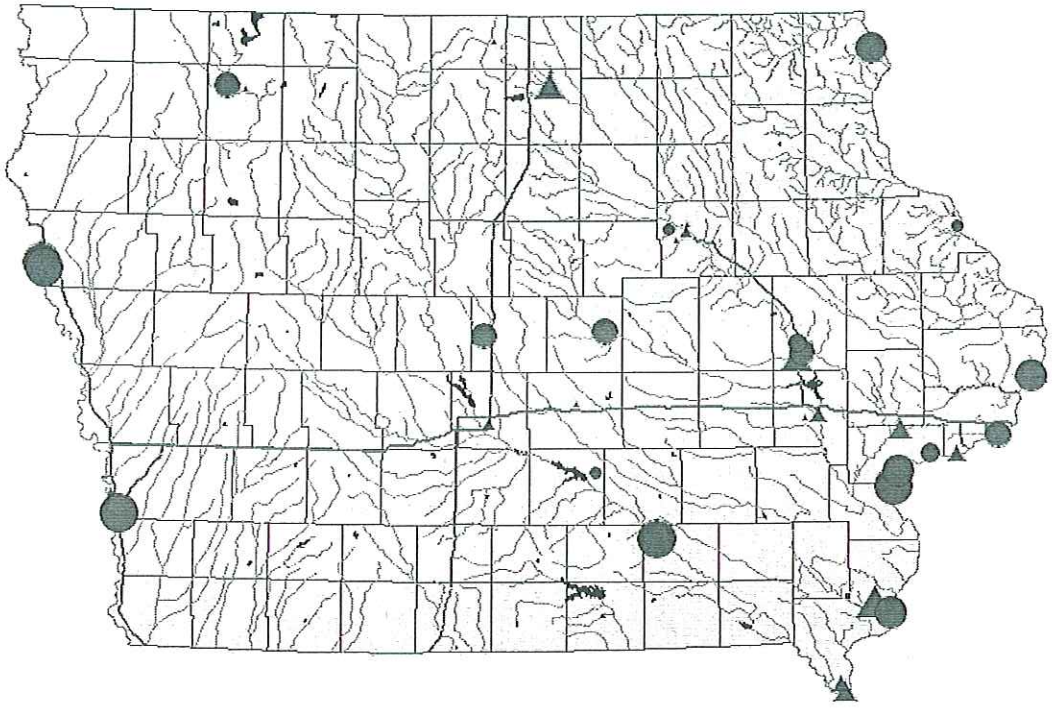
Source mapping techniques could also be expanded beyond 'location on a map displays' by integrating other forms of data analyses. Prevailing winds or the frequency of wind direction occurrences could be used to target specific areas such as water bodies or water sheds. If a goal is to sample fish tissue in the vicinity of a point source of mercury it may be useful to target that sampling at a location that is more frequently downwind, or downwind on days during which there is precipitation. Rainy days may be marked by a prevailing wind direction that is significantly different than the average prevailing winds.

It is likely that additional information in the form of mapping or mapping with associated data analyses could be identified as informative in the assessment of mercury deposition in Iowa. The ability to spatially compare data fields from different areas of specialties within the department will facilitate the ongoing evaluations.

A map of mercury emission sources is provided on the next page. This map is preliminary and subject to future refinement. Red circles represent the location of coal fired electrical generating units while purple triangles represent other mercury emission sources. In all cases the size of the symbol is scaled to the source's actual emissions as reported or estimated for the calendar year 2002, and is not meant to characterize the area of mercury deposition around the facility.

Source mapping can be used to quickly identify spatial relationships among important variables such as the relative density of source types or emissions in various parts of the state. Additionally, source mapping allows for the integration of information from multiple specialties where appropriate. This technique does have limitations. With regards to mercury deposition, a specific source location may or may not have a significant influence on fish tissue concentrations based on the numerous physical, chemical and biological processes that occur between emissions and fish tissue concentrations. Conclusions drawn from such analyses are not designed to accomplish substantive determinations of risk or culpability.

Year 2002 Total Mercury Emissions (in pounds)



Coal Fired Utility	Other Sources
0.00 - 2.08	0.00 - 2.08
2.09 - 10.00	2.09 - 10.00
10.01 - 26.26	10.01 - 26.26
26.27 - 61.40	26.27 - 61.40
61.41 - 100.00	61.41 - 100.00
100.01 - 435.42	100.01 - 435.42

Lakes
Rivers
Interstate
county

Mercury Emissions

Mercury is a naturally occurring element and as such, emissions to the atmosphere result from both natural and anthropogenic activities. Estimates of global atmospheric mercury emissions roughly apportion the mass of global atmospheric mercury releases as one-third from natural sources and one-third from direct emissions from man-made sources. The remaining one-third that is estimated to result from re-emission (volatilization) of previously deposited mercury[2,3]. Total mercury emissions from all emission sources, natural and human specific, are estimated at 4,850 to 8,250 tons per year[4].

Emission Source Types

As a first order estimate, atmospheric mercury emissions can be divided into four primary categories:

- Direct point-source emissions
- Direct area-source emissions
- Biogenic (natural) emissions
- Re-emissions

Direct point source emissions of mercury to the atmosphere can, for some source types, be characterized by the application of federally developed emission factors. In general these emission factors roughly estimate mercury emissions by multiplying the average mercury content of a fuel by the amount of fuel burned. Sources of atmospheric releases of mercury from non-combustion sources such as chlor-alkali plants or other processes utilizing mercury can be estimated through emission factors or through mass conservation calculations. Stack testing and continuous emissions monitoring requirements that are part of CAMR will result in more accurate estimates of mercury emissions from coal fired power plants[5]. Overall, emissions of mercury from point sources are likely more accurate, in a relative sense, than emission estimates from any of the other mercury emission categories.

Area source emissions are generally characterized as non-point sources of pollutant emissions. In contrast with point source emissions, area source emissions are not regularly defined by the amount of a pollutant emitted from a stack, but rather as the amount of pollutant emitted from an area. An example of an area source of mercury is an automotive crushing operation in which vehicles are manually compressed for later use

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[2] Seingeur, 2004 and Mason and Sheu, 2002 from EPA Website

[3] Seingeur, 2004 and Mason and Sheu, 2002 from EPA Website

[4] http://www.epa.gov/mercury/control_emissions/global.htm which references United Nations Environment Programme Global Mercury Assessment, 2002, using J. Pacyna 1995 data, as presented by the Arctic Monitoring and Assessment Programme

[5] The basis of the cap and trade program established under CAMR is accurate mercury emissions data for the coal-fired power plants subject to the rule. Each affected unit must measure mercury emissions using either a continuous emission monitors or sorbent trap monitoring system as specified in 40 CFR Part 75.82(b)(2)(ii). A detailed discussion of these requirements is Available online at: http://www.epa.gov/airmarkets/camr/FebStatusHg.doc

such as scrap metal. In this example, mercury contained in automotive switches or relays may be spilled during the compaction of a vehicle. This spillage will result in some fraction of the mercury transitioning from a liquid phase into a vapor phase in the atmosphere and being transported away from the release location on the prevailing winds. Mercury emissions from area-based emission sources are poorly defined and mass emission estimates are not widely available.

Similarly, estimates of the mass of mercury released to the atmosphere from re-emission and biogenic or natural sources are made in scientific literature. However, national and global scale modeling efforts, discussed later in this document, may provide an approach for quantifying the mass of re-emission and biogenic mercury emissions.

Mercury Species

Mercury is emitted to the atmosphere in one of three chemical forms: elemental, reactive gaseous or particulate mercury[6]. Various forms of mercury have differing chemical and physical properties which influence the atmospheric lifetime and eventual rate and method of atmospheric deposition. The level of accuracy regarding the description of the form or specie of mercury emitted from various processes is generally uncertain. Current state emission inventory efforts collect information regarding emissions of total mercury compounds and do not subdivide emissions into elemental, reactive gaseous or particulate mercury. In the *Mercury Study Report to Congress*[7] EPA speciated mercury emissions based on research conducted by Peterson et al., from 1995[8]. In the future, mercury stack testing and emissions monitoring required as part of CAMR may provide updated estimates of speciated mercury emissions from coal fired electrical generating units.

Iowa Mercury Emissions

Estimates of mercury emissions from sources in Iowa are currently limited to point source information collected as part of an annual inventory of emissions generated by major stationary sources in Iowa. To date, no specific efforts have quantified the area, biogenic, or re-emission of mercury within Iowa. Scale analysis of the magnitude of mercury released from point source mercury emissions as compared to research regarding estimated mercury mass emissions from area, biogenic, and re-emission totals would provide more information regarding the relative importance of non-point source emissions.

Mercury emissions reported in annual major industrial sources emission reporting were estimated to total 1.425 tons (~2,850 lbs) in 2002. Coal fired electrical generating units reported 0.962 tons (~1,924 lbs) emitted. Emissions of mercury during 2002 from sources other than coal fired electrical generating units totaled 0.463 tons (~926 lbs) and included

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[6] Dr. Mark Cohen, NOAA ARL, Modeling the Atmospheric Transport and Deposition of Mercury, Mercury Workshop, Great Lakes Biennial Meeting, Kingston, Ontario, Canada, June 9, 2005.

[7] Mercury Study Report to Congress

[8] Petersen, G., Å. Iverfeldt and J. Munthe. (1995) Atmospheric mercury species over Central and Northern Europe. Model calculations and comparison with observations from the Nordic Air and Precipitation Network for 1987 and 1988. Atmospheric Environment 29:47-68.

the facility reporting the single largest emission total in the state at 0.218 tons (~435 lbs). Data from calendar year 2002 were used as this period reflects the most recent triennial inventory report required by EPA.

The department has not conducted a comprehensive review of the accuracy of the mercury emissions estimates reported in periodic inventories contributed by non electric utility sources. The resulting level of uncertainty could be reduced by obtaining more data on mercury emitting processes at all major stationary sources and reviewing these data in an effort to better characterize the mercury emissions. Due to the stringent mercury emissions monitoring and reporting requirements of CAMR, emissions information from EGUs will improve after trading starts.

Mercury Measurements

Wet Deposition Measurements

The National Acid Deposition Program (NADP) was established by EPA to measure the effectiveness of its acid rain program in reducing acidic deposition in rainfall. The program is managed by the Illinois State Water Survey in Urbana, Illinois, and the data is aggregated and available online to the public. One of the components of the NADP network is the Mercury Deposition Network (MDN)[9]. The MDN currently consists of 95 sites across the U.S. and Canada. The MDN collects weekly samples of total (non-speciated) mercury in precipitation.

Dry Deposition Measurements

There are currently no practical methods for determining dry deposition rates with routine monitoring methods.[10]

Ambient Mercury Measurements

Some of the continuous emissions monitors developed for implementation of the CAMR allowance trading program have sufficient sensitivity to be used for ambient mercury measurements, and have been used by States[11] to quantify ambient mercury levels. The instrument manufactured by Tekran[12], provides speciated (reactive, elemental, and particulate) mercury data. Ambient mercury measurements may be used to compare with modeled ambient mercury concentrations, but cannot be used to directly determine wet or dry deposition rates.

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[9] http://nadp.sws.uiuc.edu/mdn/

[10] http://www.epa.gov/airnow//2006conference/wednesday/Cavender.ppt

[11] http://bronze.nescaum.org/committees/monitoring/nov05meeting/Hg-Tekran_NY-NJ.ppt

[12] http://www.tekran.com/products/ambient/2537.aspx

Regional and Global Scale Computer Modeling

In concept, a model is a computer program that attempts to recreate the behavior of a given system. Modeling techniques are frequently applied when solutions to complex environmental challenges are sought. Weather prediction and air quality remediation are two common disciplines in which modeling plays an important role. The term *regional* modeling simply refers to the geographic scale for which the model was designed. The term 'regional scale' is not bound by specific guidelines, but loosely refers to regions that range in size from that of a State up to continental scales. Two additional model classifications include local and global. Local models focus on areas in extent from a few hundred meters up to many tens of kilometers. Global scale models cover the entire Earth.

Projects involving the study of ozone and other gaseous pollutants have successfully been utilizing regional atmospheric models for several decades. In the 1990s such models were expanded to include particulate matter. The inclusion of mercury chemistry is a more recent development. For example, EPA's Community Multi-scale Air Quality model (CMAQ) first featured mercury chemistry in 2001[13]. Since that time, CMAQ has been involved in several mercury studies, including development of CAMR[14]. Additional regional models are also available to study atmospheric mercury, most notably the Comprehensive Air quality Model with Extensions (CAMx). Both models have been applied with varying degrees of success[15,16].

Regardless of the specific model chosen, conducting regional scale atmospheric mercury modeling involves three fundamental processes (further detail is provided below):

1) **Emission Inventory Development**: Accurately quantifying the emission of mercury species from natural and man-made sources.
2) **Meteorological Modeling**: Developing the surface and upper air meteorological fields to be used in the chemical transport modeling.
3) **Chemical Transport Modeling**: Predicting the transport, dispersion, and chemical transformation of mercury species in the atmosphere, including simulating how mercury in the atmosphere is deposited at the Earth's surface.

Emissions Inventory

The development of an accurate mercury emissions inventory is a challenging task. Accurately quantifying total mercury emissions from both natural and man-made area sources can be difficult as emission rates are variable and uncertainties exist. Point source emissions are more accurately quantified. However, obtaining total mercury emissions data is only the first step, as the chemical transport models require the emissions in

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[13] O. Russell Bullock, Jr: Presentation at the Lake Michigan Air Directors Consortium Mercury Workshop, Rosemont, IL, February 22nd, 2006.

[14] EPA, 2005: Technical Support Document for the Final Clean Air Mercury Rule. http://www.epa.gov/ttn/atw/utility/aqm_oar-2002-0056-6130.pdf

[15] Ibid.

[16] Greg Yarwood, et. al., 2003: *Modeling Atmospheric Mercury Chemistry and Deposition with CAMx for a 2002 Annual Simulation*, prepared for the Wisconsin Department of Natural Resources.

speciated form. Factors must therefore be obtained which partition the total mercury among its elemental, reactive gaseous, and particulate forms. Literature review, data mining, consultation with leading experts, and obtaining updated emission inventories from other states are common prerequisite tasks.

Meteorological Modeling

The development of adequate meteorological modeling fields requires implementation of weather models similar to those used by the forecasting community. As in all meteorological modeling, uncertainty and error can not be eliminated. Particular attention will need to be paid to the precipitation predictions due to the importance of wet deposition. Historically, modeling precipitation events accurately has proven challenging. Alternative techniques, such as scaling procedures which incorporate observational data[17], may need to be researched to improve precipitation fields.

Chemical Transport Modeling

Regional chemical transport models can be used to assess how changes in mercury emissions may impact mercury deposition. The development of CAMR utilized such an approach, employing the CMAQ model to assist with the development of the cap and trade program. Modeling data may also be useful in researching spatial and temporal patterns of mercury deposition across a given region. More sophisticated models provide the ability to track the mercury deposition attributable to specific sources and/or source sectors. Meteorological influences, such as precipitation variability over a regional scale, can also be assessed.

The quality of modeling data is highly dependent upon two factors: 1) the accuracy of the input data; and 2) the correctness of the science upon which the models are formulated. Meteorological and emissions data are two forms of input data previously discussed. Regional chemical transport models also require input data known as 'boundary conditions'. By definition, a regional model covers a limited area of the earth. Given the global nature of mercury transport, the concentrations of atmospheric mercury entering through the edge of a model domain (the boundary conditions) must be known. Such data can only be supplied through a global model. Global models are typically research grade and not suited for application within most State regulatory agencies. For certain years, such as 2001 and 2002, global model data is available from outside sources. Additional data may become available as mercury research continues.

The science governing mercury deposition is continuously under development and tools such as CMAQ incorporate the latest developments and reflect the current state-of-the-science. However, as noted in the CAMR Technical Support Documentation, currently assessing the accuracy of modeled predictions of total mercury deposition is hampered by a lack of observational data. No dry deposition measurement networks exist and the MDN sites are predominantly concentrated in the eastern U.S. Using the limited MDN dataset, EPA found CMAQ to generally underpredict mercury wet deposition by approximately 23%. No comments regarding the appropriateness of this value were

[17] Greg Yarwood, et. al., 2003: *Modeling Atmospheric Mercury Chemistry and Deposition with CAMx for a 2002 Annual Simulation*, prepared for the Wisconsin Department of Natural Resources.

provided. The lack of observational data, in combination with scientific and modeling uncertainty, could potentially limit whether the model could produce information useful to the department.

Local Scale Computer Modeling

Air dispersion modeling analyses are conducted to predict ground level ambient air concentrations of pollutants from a source of emissions. The air quality assessments associated with construction permits often include a dispersion modeling analysis to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS). Dispersion modeling is a preferred tool for this type of demonstration since modeling can be used to evaluate changes prior to construction and because modeling is not restricted by the spatial and temporal limitations of an ambient monitor.

The *Guideline on Air Quality Models* (40 CFR Part 51, Appendix W) specifies the preferred air quality models to be used for regulatory purposes and provides guidance for their use. There are a variety of types of models available for regulatory use, with varying levels of sophistication. For the past 25 years, the Industrial Source Complex Short-Term model (ISC) has been the main regulatory dispersion model for evaluating State Implementation Plans (SIPs), new source construction permits, risk assessments, and exposure analyses for toxic pollutants.

ISC is considered to be a steady-state Gaussian plume model. A steady-state model assumes that the emission source and meteorological conditions remain constant over a period of time. Gaussian models assume that the pollutant mass within the plume has a normal distribution (follows a bell-shaped curve) with the highest concentrations located at the center of the plume. The ISC dispersion model can be used to evaluate impacts from numerous industrial facilities in either rural or urban settings, located in areas with flat or rolling terrain, and is applicable for transport distances of less than 50 kilometers. Inputs include the source data (location, emission rate, stack height and diameter, the stack gas exit velocity and temperature, and possibly building information), a receptor grid (defining the locations where the predicted concentrations will be calculated), and five years of hourly meteorological data.

The ISC model can account for wet and dry deposition of both gaseous pollutants and particulate pollutants. Inclusion of wet and dry deposition in a modeling analysis requires additional information such as the chemical speciation of the mercury; information on the diameter, density, scavenging coefficients, and mass fraction of each size category of particulate mercury; and deposition velocities for the gaseous forms of mercury.

On December 9, 2005, the *Guideline on Air Quality Models* replaced the ISC model with the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) as the preferred model for most regulatory applications. Iowa will begin requiring the use of this regulatory model December 9, 2006, as required by federal regulation. AERMOD is also a steady-state Gaussian plume model with wet and dry deposition algorithms and many improvements including state-of-the-art equations that can better simulate the turbulent air layer next to the earth's surface and better characterize the movement of the air stream around building structures. Any future local scale mercury deposition modeling conducted by the department will be accomplished with AERMOD.

The ISC model has been used to evaluate local-scale deposition of mercury to varying degrees of success. In the *Mercury Study Report to Congress* the deposition of mercury emissions were evaluated by a simulation of regional-scale emissions over a one year period and prediction of local-scale transport. One application of ISC included a study designed to examine the possibility that emissions from coal-fired power plants might lead to "hot spots" of mercury deposition[18]. Results from this report found little correlation between the modeled and monitored data.

Unknowns associated with emissions data, the processes affecting the wet and dry deposition of mercury, and the atmospheric chemistry of mercury, all contribute to uncertainty in model results. As the science improves, and as the changes are incorporated in modeling programs such as AERMOD, some of the uncertainties associated with modeling emissions of mercury will be reduced.

[18] T.M. Sullivan, B. Bowerman, J. Adams, F.D. Lipfert, S.M. Morris, A. Bando, R. Pena, and R. Blake. (2005) Local Impacts of Mercury Emissions from Coal Fired Power Plants, Brookhaven National Laboratory BNL-73967-2005.

Risk Assessments and Health Effects

The current review is limited to evaluating the applicability of tools that could be applied in estimating atmospheric deposition of mercury in Iowa. This represents only a portion of the mercury cycle relevant to the environmental or public health endpoints of interest. The assessment tools reviewed in this document will not directly provide estimates of resulting fish tissue concentrations of mercury or human exposure and risk assessments. In fact, estimates of mercury deposition to the surface of the earth are only one step in comprehensive risk assessment. As noted in Sullivan (reference above) the following additional steps also influence the eventual human health outcomes:

- Terrestrial transport (e.g., runoff)
- Aquatic processes
- Methylation and bioconcentration leading to mercury levels in fish
- Capture and consumption by humans
- Other sources of methyl mercury
- Resulting steady state body burden
- Concentration in fetal brain
- Adverse health effects

In some instances the estimates of atmospheric mercury deposition can be used by health experts as inputs to evaluate risk assessment and health effects of the components listed above. As mentioned in the executive summary, it is important to note that atmospheric deposition estimates will not necessarily be directly correlated with fish tissue concentrations or human health effects. For example, high deposition occurring in an area where deposited mercury is immobilized and sequestered from methylation and bioaccumulation may not likely result in adverse human health effects. However, subsistence type consumption of fish from a location prone to methylation and bioaccumulation would more likely result in human health effects. In short, while assessing atmospheric deposition in particular areas where excessive deposition is estimated to occur can provide a level of understanding of the processes which result in human health effects, it is not a level that is fully inclusive.

Conclusion

Various tools are available that assist with efforts to estimate mercury deposition. Within the suite of tools available, no single resource is capable of providing a comprehensive picture of atmospheric mercury deposition and subsequent risk. The identification of additionally available skills for the evaluation of aspects of the mercury cycle beyond atmospheric deposition (or the development of partnerships) will be needed to fully assess the human health implications of mercury deposition in Iowa.

In the short term, source mapping tools combined with simple meteorological data analyses can be applied to facilitate decisions regarding fish tissue sampling location. In addition, department staff can continue to track improvements in mercury science and technical tools. These activities can provide rough estimates of possible locations of interest and a starting point for more targeted fish tissue sampling locations.

Ch. 65 – NPDES

Any interested person may make written suggestions or comments on the proposed amendments on or before **March 6, 2009**. Written comments should be directed to Gene Tinker, Iowa Department of Natural Resources, Wallace State Office Building, 502 E. 9th St., Des Moines, Iowa 50319-0034; fax (515)281-8895; email gene.tinker@dnr.iowa.gov.

Also, there will be public hearings as follows, at which time persons may present their views either orally or in writing:

March 3, 2009 7:00 p.m. Iowa Lakes Community College (tentative)
Room
1900 North Grand Avenue
Spencer, Iowa

March 4, 2009 9:00 a.m. DNR Field Office
Conference Room
1401 Sunnyside Lane
Atlantic, Iowa

March 4, 2009 3:00 p.m. Kirkwood Center for Continuing Education
Room 123
7725 Kirkwood Boulevard
Cedar Rapids, Iowa

March 5, 2009 2:00 p.m. Wallace State Office Building
5th Floor Conference Rooms
502 E. 9th Street
Des Moines, Iowa

At the hearing people will be asked to give their names and addresses for the record and to confine their remarks to the subject of the rule.

Any persons who intend to attend a public hearing and have special requirements such as hearing or mobility impairments should contact the Department of Natural Resources and advise of specific needs.

				Recreational Use Designations			Aquatic Life Use Designations		
	Stream Name	Basin	Rulemaking (Y/N)	Stream Segment Length (miles)	Current Use Designation	Recommended Use Designation	Aquatic Stream Segment Length (miles)	Current Use Designation	Recommended Use Designation
1	Apple Creek (Linn Co.)	Iowa-Cedar	Y	1.00	A1	A2	1	B(WW-1)	B(WW-2)
2	Ballard Creek (Story Co.)	Skunk	Y	4.75	A1	A2			
3	Bear Creek (Wapello Co.)	Des Moines	N	0.56	A1	A1	0.56	B(WW-1)	B(WW-1)
4	Bear Creek (Wapello Co.)	Des Moines	Y	2.61	A1	A2	2.61	B(WW-1)	B(WW-2)
5	Big Bear Creek (Poweshiek/Iowa Co.)	Iowa-Cedar	Y	2.04	A1	A3			
6	Big Bear Creek (Poweshiek/Iowa Co.)	Iowa-Cedar	Y	16.17	A1	A2			
7	Black Hawk Creek (Black Hawk/Grundy Co.)	Iowa-Cedar	Y	24.50	A1	A3			
8	Black Hawk Creek (Black Hawk/Grundy Co.)	Iowa-Cedar	Y	12.00	A1	A2			
9	Blue Creek (Benton/Linn Co.)	Iowa-Cedar	Y	6.33	A1	A2	5.1	B(WW-1)	B(WW-2)
10	Brewers Creek (Hamilton Co.)	Des Moines	Y	1.54	A1	A3	5.03	B(WW-1)	B(WW-2)
11	Brewers Creek (Hamilton Co.)	Des Moines	Y	3.49	A1	A2		B(WW-1)	B(WW-2)
12	Brush Creek (Marshall Co.)	Iowa-Cedar	Y	7.86	A1	A2	4.81	B(WW-1)	B(WW-2)
13	Bulger Creek (Dallas Co.)	Des Moines	Y	2.67	A1	A2	2.67	B(WW-1)	B(WW-2)
14	Burr Oak Creek (Jefferson Co.)	Skunk	Y	5.92	A1	A2	5.98	B(WW-1)	B(WW-2)
15	Clear Creek (Cerro Gordo Co.)	Iowa-Cedar	Y	1.61	A1	A2	1.61	B(WW-1)	B(WW-2)
16	Crooked Creek (Cedar Co.)	Iowa-Cedar	N	0.11	A1	A1	0.11	B(WW-1)	B(WW-1)
17	Crooked Creek (Cedar Co.)	Iowa-Cedar	Y	11.07	A1	A2	11.07	B(WW-1)	B(WW-2)
18	Crow Creek (Jefferson Co.)	Skunk	Y	3.10	A1	A3	3.1	B(WW-1)	B(WW-2)
19	Deep Creek (Plymouth Co.)	Western	Y	8.39	A1	A2			
20	Deep Creek (Plymouth Co.)	Western	N	0.69	A1	A1			
21	Deep Creek (Plymouth Co.)	Western	Y	9.42	A1	A2			
22	Drainage Ditch #13 (Hancock Co.)	Des Moines	Y	7.44	A1	A2	7.69	B(WW-1)	B(WW-2)
23	Drainage Ditch #4 (Wright Co.)	Des Moines	Y	2.47	A1	A2	2.47	B(WW-1)	B(WW-2)
24	Drainage Ditch #81 (Worth Co.)	Iowa-Cedar	Y	1.80	A1	A2	1.8	B(WW-1)	B(WW-2)
25	Dry Creek (Benton/Linn Co.)	Iowa-Cedar	Y	6.13	A1	A2		B(WW-1)	B(WW-2)
26	Dry Creek (Linn Co.)	Iowa-Cedar	Y	1.17	A1	A3	7.3	B(WW-1)	B(WW-2)
27	East Branch Blue Creek (Lin Co.)	Iowa-Cedar	Y	1.13	A1	A2	1.13	B(WW-1)	B(WW-2)
28	East Nodaway River	Southern	Y	35.04	A1	A2			
29	Elk Run (Black Hawk Co.)	Iowa-Cedar	Y	2.06	A1	A3			
30	Elk Run (Black Hawk Co.)	Iowa-Cedar	Y	0.83	A1	A2			
31	Flint Creek (Des Moines Co.)	Iowa-Cedar	N	6.14	A1	A1			
32	Flint Creek (Des Moines Co.)	Iowa-Cedar	Y	15.16	A1	A2			
33	Fourmile Creek (Kossuth Co.)	Des Moines	Y	10.70	A1	A2	10.7	B(WW-1)	B(WW-2)
34	Fourmile Creek (Union Co.)	Southern	Y	5.18	A1	A2	1.25	B(WW-1)	B(WW-2)
35	Fudge Creek (Wapello Co.)	Des Moines	Y	1.14	A1	A2	1.14	B(WW-1)	B(WW-2)
36	Granger Creek (Dubuque Co.)	Northeast	Y	7.10	A1	A2			
37	Hartgrave Creek (Franklin/Butler Co.)	Iowa-Cedar	Y	12.20	A1	A2			
38	Hawkeye Creek (Des Moines Co.)	Iowa-Cedar	Y	10.85	A1	A2	10.85	B(WW-1)	B(WW-2)
39	Hawkeye-Dolbee Diversion Channel (Des Moines Co.)	Iowa-Cedar	Y	2.97	A1	A2	2.97	B(WW-1)	B(WW-2)
40	Honey Creek (Delaware Co.)	Northeast	Y	13.70	A1	A2	4.8	B(WW-1)	B(WW-2)
41	Indian Creek (Audobon/Shelby/Cass Co.)	Southern	Y	25.65	A1	A2	3.44	B(WW-1)	B(WW-2)
42	Indian Creek (Linn Co.)	Iowa-Cedar	Y	17.40	A1	A3			
43	Indian Creek (Sac Co.)	Des Moines	Y	8.14	A1	A2			
44	Indian Creek (Sioux Co.)	Western	Y	15.76	A1	A2	6.33	B(WW-1)	B(WW-2)
45	Indian Creek (Tama Co.)	Iowa-Cedar	Y	0.30	A1	A2	0.3	B(WW-1)	B(WW-2)
46	Little Bear Creek (Poweshiek Co.)	Iowa-Cedar	Y	17.55	A1	A2			
47	Little Cedar River (Chickasaw/Floyd/Mitchell Co.)	Iowa-Cedar	N	60.80	A1	A1			
48	Little Cedar River (Mitchell Co.)	Iowa-Cedar	Y	8.04	A1	A2			
49	Little Flint Creek (Des Moines Co.)	Iowa-Cedar	Y	2.98	A1	A2	2.98	B(WW-1)	B(WW-2)
50	Little Maquoketa River (Dubuque Co.)	Northeast	N	8.00	A1	A1			
51	Little Maquoketa River (Dubuque Co.)	Northeast	Y	20.80	A1	A2			
52	Little Walnut Creek (Appanoose Co.)	Southern	Y	18.30	A1	A2	6.67	B(WW-1)	B(WW-3)
53	Lutes Creek (Marshall Co.)	Iowa-Cedar	Y	2.25	A1	A2	2.25	B(WW-1)	B(WW-2)
54	Marvel Creek (Adair Co.)	Southern	Y	8.22	A1	A2	8.22	B(WW-1)	B(WW-2)
55	Mitchell Creek (Jefferson Co.)	Skunk	Y	6.32	A1	A2	6.32	B(WW-1)	B(WW-2)
56	Mosquito Creek (Pottawattamie Co.)	Western	N	6.49	A1	A1			
57	Mosquito Creek (Pottawattamie Co.)	Western	Y	3.13	A1	A3			
58	Mosquito Creek (Pottawattamie/Harrison/Shelby Co.)	Western	Y	30.70	A1	A2			
59	Mosquito Creek (Shelby Co.)	Western	N	0.08	A1	A1			
60	Mosquito Creek (Shelby Co.)	Western	Y	7.41	A1	A2	1.1	B(WW-1)	B(WW-2)
61	Mud Creek (Benton Co.)	Iowa-Cedar	Y	0.81	A1	A2			
62	Mud Creek (Polk Co.)	Des Moines	Y	19.81	A1	A2			
63	Murray Creek (O'Brien Co.)	Western	Y	6.50	A1	A2	6.5	B(WW-1)	B(WW-2)
64	Neola Creek (Pottawattamie Co.)	Western	Y	0.34	A1	A2	0.34	B(WW-1)	B(WW-2)
65	North Timber Creek (Marshall Co.)	Iowa-Cedar	Y	22.05	A1	A2	8.31	B(WW-1)	B(WW-2)
66	Orange City Slough (Sioux Co.)	Western	Y	8.40	A1	A2	8.4	B(WW-1)	B(WW-2)
67	Otter Creek (Franklin Co.)	Iowa-Cedar	Y	7.06	A1	A2			
68	Otter Creek (Franklin Co.)	Iowa-Cedar	Y	0.52	A1	A3			
69	Otter Creek (Franklin Co.)	Iowa-Cedar	Y	4.81	A1	A2			
70	Platte River	Southern	Y	41.02	A1	A2	1.6	B(WW-1)	B(WW-2)
71	Plum Creek (Delaware Co.)	Northeast	Y	18.38	A1	A2			
72	Plum Creek (Delaware Co.)	Northeast	Y	0.63	A1	A3			
73	Plum Creek (Delaware Co.)	Northeast	Y	31.28	A1	A2	3.75	B(WW-1)	B(WW-2)
74	Plum Creek (Delaware Co.)	Northeast	N	0.27	No Rec Use	No Rec Use	0.27	General Use	General Use
75	Sewer Creek (Jasper Co.)	Skunk	Y	5.64	A1	A2	5.64	B(WW-1)	B(WW-2)

76	Shoal Creek (Appanoose Co.)	Southern	Y	23.14	A1	A2			
77	Sixmile Creek (Sioux Co.)	Western	Y	29.13	A1	A2	7.93	B(WW-1)	B(WW-2)
78	Snipe Creek (Marshall Co.)	Iowa-Cedar	Y	2.84	A1	A2	2.84	B(WW-1)	B(WW-2)
79	South Timber Creek (Marshall Co.)	Iowa-Cedar	Y	12.60	A1	A2			
80	Spring Creek (Franklin Co.)	Iowa-Cedar	Y	6.89	A1	A2			
81	Spring Creek (Franklin Co.)	Iowa-Cedar	Y	0.33	A1	A3			
82	Spring Creek (Franklin Co.)	Iowa-Cedar	Y	2.58	A1	A2			
83	Squaw Creek (Franklin Co.)	Iowa-Cedar	Y	9.29	A1	A2			
84	Squaw Creek (Franklin Co.)	Iowa-Cedar	Y	2.61	A1	A3			
85	Squaw Creek (Linn Co.)	Iowa-Cedar	Y	1.61	A1	A2			
86	Stony Creek (Clay Co.)	Western	Y	1.35	A1	A2			
87	Sugar Creek (Keokuk Co.)	Skunk	Y	1.70	A1	A2	1.7	B(WW-1)	B(WW-2)
88	Timber Creek (Marshall Co.)	Iowa-Cedar	Y	4.50	A1	A2			
89	Twelvemile Creek (Union Co.)	Southern	Y	21.25	A1	A2	11.36	B(WW-1)	B(WW-2)
90	Unnamed Creek (#1) (BP Products Ottumwa Terminal)	Des Moines	N	0.27	No Rec Use	No Rec Use	0.27	General Use	General Use
91	Unnamed Creek (#1) (City of Atkins)	Iowa-Cedar	Y	0.39	A1	A2	0.39	B(WW-1)	B(WW-2)
92	Unnamed Creek (#1) (City of Brighton)	Skunk	Y	0.16	A1	A2	0.16	B(WW-1)	B(WW-2)
93	Unnamed Creek (#1) (City of Cincinnati)	Southern	N	0.01	No Rec Use	No Rec Use	0.014	General Use	General Use
94	Unnamed Creek (#1) (City of Creston WTP)	Southern	N	0.05	No Rec Use	No Rec Use	0.05	General Use	General Use
95	Unnamed Creek (#1) (City of Elkhart)	Skunk	Y	0.41	A1	A2	0.41	B(WW-1)	B(WW-2)
96	Unnamed Creek (#1) (City of Middletown)	Iowa-Cedar	N	0.70	No Rec Use	No Rec Use	0.7	General Use	General Use
97	Unnamed Creek (#1) (City of Milo)	Des Moines	Y	2.38	A1	A2	2.38	B(WW-1)	B(WW-3)
98	Unnamed Creek (#1) (City of Thayer)	Southern	N	1.46	No Rec Use	No Rec Use	1.46	General Use	General Use
99	Unnamed Creek (#1) (HWH Company)	Iowa-Cedar	Y	0.47	A1	A2	0.47	B(WW-1)	B(WW-2)
100	Unnamed Creek (#1) (HWH Company)	Iowa-Cedar	N	0.49	No Rec Use	No Rec Use	0.49	General Use	General Use
101	Unnamed Creek (#1) (Lakewood Estates MHP)	Northeast	Y	3.10	A1	A2	3.1	B(WW-1)	B(WW-2)
102	Unnamed Creek (#1) (Little Sioux Corn Processing)	Western	Y	2.00	A1	A2	2	B(WW-1)	B(WW-2)
103	Unnamed Creek (#1) (Missouri Valley Energy - Exira)	Western	Y	0.32	A1	A2	0.32	B(WW-1)	B(WW-2)
104	Unnamed Creek (#1) (Missouri Valley Energy - Exira)	Western	N	0.02	A1	A1	0.02	B(WW-1)	B(WW-2)
105	Unnamed Creek (#1) (Missouri Valley Energy - Exira)	Western	Y	0.29	A1	A2	0.29	B(WW-1)	B(WW-2)
106	Unnamed Creek (#1) (Siouxland Energy)	Western	Y	1.40	A1	A2	1.4	B(WW-1)	B(WW-2)
107	Unnamed Creek (#1) (Southdale Addition)	Des Moines	N	0.17	No Rec Use	No Rec Use	0.17	General Use	General Use
108	Unnamed Creek (#2) (BP Products Ottumwa Terminal)	Des Moines	N	0.46	No Rec Use	No Rec Use	0.46	General Use	General Use
109	Unnamed Creek (#2) (City of Atkins)	Iowa-Cedar	Y	0.95	A1	A2	0.95	B(WW-1)	B(WW-2)
110	Unnamed Creek (#2) (City of Brighton)	Skunk	Y	2.68	A1	A2	2.68	B(WW-1)	B(WW-2)
111	Unnamed Creek (#2) (City of Cincinnati)	Southern	Y	4.06	A1	A2	4.06	B(WW-1)	B(WW-2)
112	Unnamed Creek (#2) (City of Creston WTP)	Southern	N	0.85	No Rec Use	No Rec Use	0.85	General Use	General Use
113	Unnamed Creek (#2) (City of Elkhart)	Skunk	N	1.68	No Rec Use	No Rec Use	1.68	General Use	General Use
114	Unnamed Creek (#2) (City of Elkhart)	Skunk	Y	0.89	A1	A2	0.89	B(WW-1)	B(WW-2)
115	Unnamed Creek (#2) (City of Hedrick)	Skunk	Y	1.42	A1	A2	1.42	B(WW-1)	B(WW-2)
116	Unnamed Creek (#2) (City of Middletown)	Iowa-Cedar	Y	2.30	A1	A2	2.3	B(WW-1)	B(WW-2)
117	Unnamed Creek (#2) (City of Milo)	Des Moines	Y	1.38	A1	A2	1.38	B(WW-1)	B(WW-2)
118	Unnamed Creek (#2) (Little Sioux Corn Processing)	Western	N	0.38	No Rec Use	No Rec Use	0.38	General Use	General Use
119	Unnamed Creek (#2) (Missouri Valley Energy - Exira)	Western	N	0.37	No Rec Use	No Rec Use	0.37	General Use	General Use
120	Unnamed Creek (#2) (Oak Hills Subdivision)	Iowa-Cedar	Y	1.47	A1	A2	1.47	B(WW-1)	B(WW-2)
121	Unnamed Creek (#2) (Siouxland Energy)	Western	N	0.15	No Rec Use	No Rec Use	0.15	General Use	General Use
122	Unnamed Creek (#2) (Southdale Addition)	Des Moines	N	1.00	No Rec Use	No Rec Use	1	General Use	General Use
123	Unnamed Creek (#2) (West Kimberly MHP)	Northeast	N	1.02	No Rec Use	No Rec Use	1.02	General Use	General Use
124	Unnamed Creek (#2a) (Lakewood Estates MHP)	Northeast	N	0.27	No Rec Use	No Rec Use	0.27	General Use	General Use
125	Unnamed Creek (#3) (City of Milo)	Des Moines	N	0.11	No Rec Use	No Rec Use	0.11	General Use	General Use
126	Unnamed Creek (#3) (UP Electronics)	Iowa-Cedar	N	0.13	No Rec Use	No Rec Use	0.13	General Use	General Use
127	Unnamed Creek (Ajinomoto USA)	Des Moines	N	0.51	No Rec Use	No Rec Use	0.51	General Use	General Use
128	Unnamed Creek (aka Johnson's Creek)	Western	Y	0.45	A1	A2	0.45	B(WW-1)	B(WW-2)
129	Unnamed Creek (BP Products Cedar Rapids)	Iowa-Cedar	N	0.80	No Rec Use	No Rec Use	0.8	General Use	General Use
130	Unnamed Creek (Bulk Petroleum)	Iowa-Cedar	N	0.62	No Rec Use	No Rec Use	0.62	General Use	General Use
131	Unnamed Creek (Bulk Petroleum)	Iowa-Cedar	Y	0.47	A1	A2	0.47	B(WW-1)	B(WW-2)
132	Unnamed Creek (Chantland-PVS Company)	Des Moines	Y	0.41	A1	A2	0.41	B(WW-1)	B(WW-2)
133	Unnamed Creek (City of Bondurant)	Des Moines	N	0.09	No Rec Use	No Rec Use	0.09	General Use	General Use
134	Unnamed Creek (City of Carroll)	Des Moines	Y	0.71	A1	A2			
135	Unnamed Creek (City of Creston WWTP)	Southern	Y	0.28	A1	A2	0.38	B(WW-1)	B(WW-2)
136	Unnamed Creek (City of Denmark)	Skunk	N	3.27	No Rec Use	No Rec Use	3.27	General Use	General Use
137	Unnamed Creek (City of Earlville)	Northeast	Y	0.66	A1	A2	0.66	B(WW-1)	B(WW-2)
138	Unnamed Creek (City of Gilman)	Iowa-Cedar	N	0.62	No Rec Use	No Rec Use	0.62	General Use	General Use
139	Unnamed Creek (City of Greenfield)	Southern	N	0.02	No Rec Use	No Rec Use	0.02	General Use	General Use
140	Unnamed Creek (City of Hedrick)	Skunk	Y	0.49	A1	A2	0.49	B(WW-1)	B(WW-2)
141	Unnamed Creek (City of Hills)	Iowa-Cedar	Y	1.01	A1	A2	1.01	B(WW-1)	B(WW-2)
142	Unnamed Creek (City of Hospers)	Western	N	0.77	No Rec Use	No Rec Use	0.77	General Use	General Use
143	Unnamed Creek (City of Huxley)	Skunk	Y	0.54	A1	A2	0.54	B(WW-1)	B(WW-2)
144	Unnamed Creek (City of Laurel)	Iowa-Cedar	N	0.38	No Rec Use	No Rec Use	0.38	General Use	General Use
145	Unnamed Creek (City of Malvern)	Southern	Y	0.86	A1	A2	0.86	B(WW-1)	B(WW-2)
146	Unnamed Creek (City of Remsen)	Western	Y	0.42	A1	A2	0.42	B(WW-1)	B(WW-2)
147	Unnamed Creek (City of Rickardsville)	Northeast	Y	0.78	A1	A2	0.78	B(WW-1)	B(WW-2)
148	Unnamed Creek (City of Sioux Center)	Western	Y	1.45	A1	A2	1.45	B(WW-1)	B(WW-2)
149	Unnamed Creek (City of Sully)	Skunk	Y	1.99	A1	A2	1.99	B(WW-1)	B(WW-2)
150	Unnamed Creek (Corn Belt Power)(AKA Bull Ditch)	Western	Y	1.20	A1	A2	1.2	B(WW-1)	B(WW-2)
151	Unnamed Creek (DNR Viking Lake)	Southern	Y	2.42	A1	A2	2.42	B(WW-1)	B(WW-2)
152	Unnamed Creek (DNR Viking Lake)	Southern	N	0.23	No Rec Use	No Rec Use	0.23	General Use	General Use
153	Unnamed Creek (Echo Valley MHP #2)	Iowa-Cedar	Y	0.09	A1	A2	0.09	B(WW-1)	B(WW-2)
154	Unnamed Creek (Ecosystems Inc.)	Des Moines	Y	0.75	A1	A2	0.75	B(WW-1)	B(WW-2)
155	Unnamed Creek (Gold Key Motel)	Iowa-Cedar	N	1.01	No Rec Use	No Rec Use	1.01	General Use	General Use
156	Unnamed Creek (Hancor Inc.)	Northeast	N	0.56	No Rec Use	No Rec Use	0.56	General Use	General Use
157	Unnamed Creek (Heartland Lysine)	Des Moines	Y	0.70	A1	A2	0.7	B(WW-1)	B(WW-2)

158	Unnamed Creek (IAAP)	Skunk	Y	0.63	A1	A2	0.63	B(WW-1)	B(WW-3)
159	Unnamed Creek (IAAP)	Skunk	N	0.85	No Rec Use	No Rec Use	0.85	General Use	General Use
160	Unnamed Creek (IAMU)	Des Moines	Y	2.72	A1	A2	2.72	B(WW-1)	B(WW-2)
161	Unnamed Creek (John Deere Davenport Works)	Northeast	Y	4.20	A1	A3	4.2	B(WW-1)	B(WW-2)
162	Unnamed Creek (John Deere Engineering Center)	Iowa-Cedar	Y	0.73	A1	A2	0.73	B(WW-1)	B(WW-2)
163	Unnamed Creek (Jolly Roger Campground)	Iowa-Cedar	N	0.11	No Rec Use	No Rec Use	0.11	General Use	General Use
164	Unnamed Creek (Magellan Pipeline - Johnson Co.)	Iowa-Cedar	Y	0.60	A1	A3	0.6	B(WW-1)	B(WW-2)
165	Unnamed Creek (McCreary Community Building)	Des Moines	Y	0.58	A1	A2	0.58	B(WW-1)	B(WW-2)
166	Unnamed Creek (Murphy Farms)	Des Moines	N	0.63	No Rec Use	No Rec Use	0.63	General Use	General Use
167	Unnamed Creek (Siouxpreme Packing)	Western	Y	2.90	A1	A2	2.9	B(WW-1)	B(WW-2)
168	Unnamed Creek (Stacyville COOP Creamery)	Iowa-Cedar	Y	0.04	A1	A2	0.04	B(WW-1)	B(WW-2)
169	Unnamed Creek (Tri-Center Community School)	Western	Y	0.97	A1	A2	0.97	B(WW-1)	B(WW-2)
170	Unnamed Creek (Van Diest Supply)	Des Moines	N	2.45	No Rec Use	No Rec Use	2.45	General Use	General Use
171	Unnamed Creek (Wells Dairy - North Plant)	Western	Y	0.21	A1	A3	0.21	B(WW-1)	B(WW-2)
172	Unnamed Creek (Wells Dairy Mill Plant)	Western	Y	0.02	A1	A2	0.02	B(WW-1)	B(WW-2)
173	Walnut Creek (Appanoose Co.)	Southern	N	0.33	A1	A1			
174	Walnut Creek (Jefferson Co.)	Skunk	N	1.08	A1	A1	1.08	B(WW-1)	B(WW-1)
175	Waterman Creek (O'Brien Co.)	Western	Y	1.20	A1	A2			
176	Waugh Branch (Keokuk Co.)	Skunk	Y	1.80	A1	A2	1.8	B(WW-1)	B(WW-2)
177	West Branch Blue Creek (Benton Co.)	Iowa-Cedar	Y	3.23	A1	A2	3.23	B(WW-1)	B(WW-2)
178	West Branch Floyd River	Western	Y	53.30	A1	A2	5.7	B(WW-1)	B(WW-2)
179	Willow Creek (Cerro Gordo Co.)	Iowa-Cedar	Y	3.60	A1	A3			
180	Willow Creek (Cerro Gordo Co.)	Iowa-Cedar	Y	2.57	A1	A2			
181	Willow Creek (Cerro Gordo Co.)	Iowa-Cedar	Y	0.28	A1	A3			
182	Willow Creek (Cerro Gordo Co.)	Iowa-Cedar	Y	4.91	A1	A2			
		Yes	134						
		No	46						

UA/UAA Batch #2 Summary Table

Recreational Use Mileage Breakdown		Miles	% of assessed stream miles	Segment Count
A1 Miles		84.30	8.69%	11
A2 Miles		799.88	82.47%	119
A3 Miles		67.92	7.00%	17
No Rec Use Miles		22.76	2.35%	35
Total		**969.95**		**182**
Aquatic Life Use Mileage Breakdown				
B(WW-1)		1.75	0.62%	3
B(WW-2)		246.87	87.83%	91
B(WW-3)		9.68	3.44%	3
General Use		22.76	8.10%	35
Total		**281.06**		**132**

Memorandum

To: Commissioners of the Environmental Protection Commission

CC: Wayne Gieselman, Iowa Department of Natural Resources

From: Jessica Montana, Iowa Department of Economic Development

Date: January 13, 2009

Re: Water Quality Advocacy Bi-Annual Update

My sincerest apologies for being unable to attend and present the Water Quality Advocacy Bi-Annual Update in person; unfortunately, I had to attend to a family emergency out of the State.

Regardless, the Water Quality Advocate position has been successful since its creation in April 2007. Below are some of the accomplishments, connections and strides attempted through the Water Quality Advocate position.

After review, if you have additional questions or comments regarding the Water Quality Advocate position, please feel free to contact me at the following:

Jessica Montana
Water Quality Advocate
Iowa Department of Economic Development
200 E. Grand Avenue
Des Moines, Iowa 50309
Work: 515-242-4871
Mobile: 515-494-4593
Jessica.montana@iowalifechanging.com
www.iowalifechanging.com/business/water_quality.html

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Summary of Water Quality Advocate position

Water Quality Advocate website

The Water Quality Advocate provides assistance to entities requiring National Pollutant Discharge Elimination System (NPDES) permits (pursuant to 2006 Iowa Acts, Chapter 1178, Section 27). A focus of the Water Quality Advocate (WQA) is to assist communities in understanding and complying with its wastewater requirements, including applying for its NPDES permit. Additionally, the WQA focuses efforts towards the unsewered communities initiative. The WQA also serves as an objective source of information and assistance to small businesses, the Iowa Department of Economic Development (IDED) and the Iowa Department of Natural Resources (IDNR).

Initially, with the WQA introduction to other state agencies, private associations, communities and businesses, the overall response was welcoming. One comment included, "Good, Iowa needs this sort of position."

Assistance provided includes, but not limited to:

- Visit communities to provide direct assistance with its NPDES permits
- Assist IDNR staff, including permitting and financial assistance
- Assist State Revolving Fund to draft Request for Proposals and contract templates for the 2008 Utility Management Organizations contracts
- Facilitate monthly meetings between federal and state funding sources, including IDED, IDNR, IFA, USDA and WIRB
- Facilitate quarterly meetings between utility management organizations and federal and state funding sources
- Assist writing the business plan for the Iowa Rainscaping Initiative

Education and Outreach

- Created and maintain Water Quality Advocacy website, including listserv option, water-related presentations, upcoming events, EPA water quality updates and informational factsheets.
- Serve as liaison with Environmental Finance Center, satellite office to bring EFC to State of Iowa. This tool provides technical and financial assistance

and training for water-wastewater projects and "provide[s] help to those facing the "how to pay" challenges of environmental protection.

- Sponsored *Rain Gardens for Managing Stormwater Quality* Workshop with the Iowa Stormwater Partnership.

Presentations given:

- 2008 Iowa Disaster Recovery Conference – NPDES Permitting Requirements
- IDNR Field Office Lunch N Learns –Water Quality Advocate Resource
- Iowa Association of Municipal Utilities –State Water Quality Programs
- Iowa Government Oversight Committee Meeting – Unsewered Communities
- Iowa Rural Water Association, September 2007 & February 2008 – NPDES Permitting Requirements
- Master Builders of Iowa – NPDES Permitting Requirements
- Municipalities – NPDES Permitting Requirements
- Orenco Services, Inc. – Unsewered Communities and Financial Assistance

Unsewered Community Initiative

- Developed a living, working document for the Unsewered Community Initiative. This document includes communities throughout Iowa who have inadequate, improper or no wastewater treatment. Updating the list helps create a user-friendly list for federal and state officials, including those agencies who finance water-wastewater infrastructure projects
- Created and distributed an unsewered community marketing material. This material includes the importance of getting sewered, traditional and alternative wastewater technology options, available water-wastewater funding sources, utility management organization contact information and success stories from communities who have been sewered.

- Coordinate and facilitate meetings to discuss initiative and update 2005 Strategic Plan

Workshops

- The NPDES Permit: The Application Process
  - Audience: municipalities
  - Topic: NPDES Permitting Process, including UA/UAA process and funding opportunities available through IDNR, IDED, IFA, USDA and WIRB
  - Materials: Safe Place folder for NPDES Permit
  - Continuing Education Units available for wastewater operators
- Training on Demand for NPDES Wastewater Permitting Information Exchange (WWPIE) database
  - Free, online training for wastewater operators and city clerks to learn about new permitting tool for applying for new permits or renewing already-existing permits for WWPIE
  - WWPIE – This website will allow permit holders to renew and complete their NPDES applications online. The ultimate goal of WWPIE is to reduce inaccuracies and to increase efficiency for NPDES permit holders when submitting their applications.

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WATER QUALITY ADVOCATE

Iowa's surface and groundwater serves as a precious resource for industries, businesses and communities and provides state citizens and visitors with invaluable cultural and recreational opportunities. While water quality is regulated by the Iowa Department of Natural Resources (IDNR), regulatory compliance assistance is available through the Iowa Department of Economic Development (IDED) Water Quality Advocacy Program.

> Water Quality Advocacy Fact Sheet [PDF: 223k] — Assisting Your Business With Environmental Resources

> Water Quality Advocate — Receive federal and state updates regarding water quality issues in Iowa, including, but not limited to, permitting and compliance requirements, educational opportunities and legislative updates. Intended audience: everyone - communities, businesses, local interest groups and private citizens. ***Sign Up Here Today!***

Financial Assistance

Water/Wastewater Funding Opportunities [PDF: 90k] — Funding Available for Water-Wastewater Needs

Clean Water Starts with You - Make the Connection [PDF: 5MB]

Watershed Improvement Review Board [www.iowaagriculture.gov/IWIRB.asp] — The Watershed Improvement Review Board (WIRB) was established in 2005 by the Iowa Legislature to provide grants to watershed and water quality projects. If you are an unsewered community applying for WIRB funds, see www.iowaagriculture.gov/IWIRB/pdf/UnseweredCommunities.pdf for additional information. This document serves to provide guidance to an unsewered community applying for Watershed Improvement Funds administered by the WIRB.

EPA Region 7 Environmental Finance Center [http://efc.boisestate.edu/efc/] — The Region 7 EFC provides communities in Iowa, Kansas, Missouri and Nebraska with services, tools, financial and technical assistance.

Watershed Improvement Grants [www.iowadnr.gov/water/watershed/grants.html] — The Iowa DNR offers grants to create a watershed project. A watershed project can make changes on the land to improve water quality in Iowa's rivers, streams and lakes.

News & Events

Iowa Public Television will present a special documentary about issues related to America's water infrastructure this weekend. Called "**Liquid Assets: The Story of Our Water Infrastructure**", this documentary will take a look at drinking water, wastewater and stormwater systems and their critical role in day-to-day life, public safety and economic development — and the many issues facing these systems nationwide, including the serious factor of aging of underground infrastructure and the need for more financial investment in its improvement. Watch the trailer [liquidassets.psu.edu].

This 90-minute special will air at 5:30 p.m. January 11, statewide (confirm broadcast time through your local listings).

HOST AN EVENT:
liquidassets.psu.edu/outreach/toolkit/LiquidAssets_CommunityToolkit_0708.pdf

August 6, 2008 — EPA Continues Work on Impacts of Pharmaceuticals in Water [PDF: 24k]

EPA Approves latest Water Quality Standards for Iowa

[www.epa.gov/region07/water/iowa_water_quality_stds_decision_letter.pdf]

Wastewater

National Pollutant Discharge Elimination System (NPDES) [www.iowadnr.com/water/npdes/] — An NPDES permit allows direct discharge of wastewater to surface waters.

- Permits & Forms [www.iowadnr.gov/water/npdes/forms2.html]

Wastewater Permitting Information Exchange (WWPIE) [https://programs.iowadnr.gov/wwpie/] — You may search for individual NPDES permits, such as city or industry wastewater permits. Also, NPDES permit holders or their designees can register in order to apply for permits online. Registered permit holders or appropriate representatives can review, submit, and pay for permit applications.

Wastewater Constructions [www.iowadnr.gov/water/wastewater/downloads.html]

- Design Standards & Manuals [www.iowadnr.com/water/wastewater/]
- Forms [www.iowadnr.gov/water/wastewater/downloads.html]

Water Supply

Private Well Applications and Forms [www.iowadnr.gov/water/wells/concert.html]

Miscellaneous Water Forms, including Animal Feeding, Flood Plain, Dam safety [www.iowadnr.gov/water/forms.html]

Water Quality

Water Quality Standards [www.iowadnr.com/water/standards/] — The DNR manages water quality through the implementation of the state's Water Quality Standards. These standards are found in Chapter 61 of the Iowa Administrative Code. To evaluate the status of our water quality, the DNR both conducts monitoring and uses information from other agencies that monitor the quality of the state's surface waters and groundwater

Use Assessment/Use Attainability Analysis (UA/UAA) [www.iowadnr.gov/water/uaa.html] — Recent rulemaking and 2006 legislative action tasked IDNR to establish new levels of water quality protection. The goal is to bring Iowa closer to compliance with the Clean Water Act requirements and U.S. EPA regulations and ensure all 26,000 miles of Iowa's perennial (flowing year-round) streams are protected at the highest levels for recreation and aquatic life uses (also known as fishable/swimmable).

Antidegradation [PDF: 237k] — Antidegradation refers to federal regulations designed to maintain and protect high quality waters and existing water quality in other waters from unnecessary pollution. Visit www.iowadnr.com/water/standards/antidegradation.html for additional Antidegradation information, including maps of the currently proposed Outstanding Iowa Water areas.

Watersheds

IDNR Watershed Improvement [www.iowadnr.com/water/watershed/] — Clean watersheds and clean water start with you, and the DNR is here to help. With watershed improvement projects and other assistance, the DNR can work with you to improve our water together.

Watershed Improvement Review Board [www.iowaagriculture.gov/IWIRB.asp] — The Watershed Improvement Review Board (WIRB) was established in 2005 by the Iowa Legislature to provide grants to watershed and water quality projects.

Stormwater

Stormwater Permitting Requirements [www.iowadnr.com/water/stormwater/]

Iowa Stormwater Management Manual [www.ctre.iastate.edu/pubs/stormwater/index.cfm] — The Iowa Stormwater Management Manual presents planning and design guidelines for the management of stormwater quality and quantity in the urban environment. Though it is not a comprehensive list, this manual includes the most commonly-used stormwater management best management practices. While this manual includes most of the commonly-used stormwater management BMPs, it is not a comprehensive list.

Urban Stormwater Retrofit Practices Manual [www.cwp.org/Downloads/ELC_USRM3.pdf] — Published in August 2007, the Urban Stormwater Retrofit Practices Manual from the Center of Watershed Protection outlines the most recent ideas on how retrofits can help restore small urban watersheds. The manual was written to organize the enormous amount of information needed to restore small urban watersheds into a format that can easily be accessed by watershed groups, municipal staff, environmental consultants and other users.

Iowa Rainscaping Manual [ftp://ftp-fc.sc.egov.usda.gov/IA/news/RainGardens.pdf] — Rain Gardens are an infiltration-based stormwater management practice that relies on soils with good percolation rates to help manage rainfall and improve water quality. Install one today!

Presentations

Basic Stormwater Permitting Requirements [PDF: 2.2MB]

Introduction to Antidegradation January 2008 EPC Meeting [PDF: 902k]

National Pollutant Discharge Elimination System (NPDES) Permit [PDF: 2.6MB] — The Application Process

Effects of Use Attainability Analysis on Wastewater Treatment Plants, October 2007 [PDF: 145k]

The Pretreatment Streamlining Rule: Overview of the Changes to the National Pretreatment Regulations, April 2007 [PDF: 491k]

Helpful Links

Water Quality Helpful Links [PDF: 56k]

Water Quality Home Page [www.iowadnr.gov/water/]

Water Web [http://programs.iowadnr.gov/iowawaterweb/Map.aspx]

Interactive Mapping [http://csbweb.igsb.uiowa.edu/imsgate/introduction/home.asp]

Water Quality Standards [www.iowadnr.gov/water/standards/]

The Environmental Protection Agency [www.epa.gov/enviro/]

IDNR Water Quality Listserv Sign-up [www.iowadnr.gov/water/listserv.html] — Get the latest water quality information directly to your inbox. Subscribe to the IDNR's Water Quality listserv.

The Environmental Business Assistance Portal
[regassist.iowa.gov/business_resources/environ_assistance/] — Provides easy access to assistance with regulatory requirements and resources for your business operation or project. Information on compliance requirements, including permitting, is available.

Information on the Environmental Assistance Portal includes:

- Wastewater Construction Permits
- NPDES Permits
- Stormwater Permits
- Floodplains Permit
- Sovereign Land Construction Permit
- Funding and Technical Assistance, including contact information

To Learn More:

Phone: 515.242.4871 or 800.351.4668
E-mail: regulatoryassistance@iowalifechanging.com

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DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

2009 Department of Natural Resources Proposed Legislation
Environmental Services Division

1. Underground Storage Tank Program Funding

There is an annual tank management fee of $65 paid by owners and operators of underground storage tanks of which the DNR receives 23% of the approx. $550,000 collected annually. Under Iowa Code section 455B.479, 77% of the annual fees is transferred to the Iowa Comprehensive UST Fund Board. Since 2006, the UST Fund Board and the DNR have entered into a 28E agreement to provide the transfer of the 77% of fees to the DNR for administration of the UST operations and leak prevention program. Basically this proposal is for the DNR to retain 100% of the tank management fee that it collects to provide ongoing funding for the UST program.

2. Engine Idle Reduction Program

This proposal would establish a new policy for engine idling. According to an EPA model state idling law paper, approx. 15 states and dozens of local jurisdictions have idling laws. Since Iowa has areas of the state likely to violate federal air quality standards for particulate matter, the reduction of idling would help to reduce pm levels statewide. MO is currently proposing a heavy duty diesel idle reduction program.

3. Imposition of State Tonnage Fee for Solid Waste Disposal

This is a 2 part proposal removing the state tonnage fee exemption for construction and demolition landfills and imposing the tonnage fee on all wastes passing through transfer stations that will not be disposed of at an Iowa landfill.

4. Residential Burning Ban in Cities

This proposal is to establish a phased-in ban on the burning of residential waste (household trash and landscape waste) in and near municipalities. The phase-in will start in calendar year 2010 for cities with a population of 2500 or greater and will apply to all cities beginning in calendar year 2013.

5. Increase the Cap for Public Water Supply Program Fees

The proposal is to raise the statutory cap on public water supply fees from $350,000 to $1 million to allow for the Department, through rulemaking, to increase fees as needed to support the Drinking Water Program. The current cap was established in 1995 and does not take into account increased additional federal requirements and increasing program costs. Adequate funding is being sought to ensure that DNR can continue to conduct EPA-required elements; that operating permits are issued in a timely manner and that technical assistance remains available to public water supplies, particularly small systems, to help them comply with regulations and resolve issues within their systems.

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