

MINUTES
OF THE
ENVIRONMENTAL PROTECTION COMMISSION
MEETING
JANUARY 21, 2015

DNR WALLACE BUILDING
502 EAST 9TH STREET
DES MOINES, IOWA

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MEETING MINUTES

CALL TO ORDER

The meeting of the Environmental Protection Commission was called to order by Vice Chairperson Max Smith at 1:30 p.m. on January 21, 2015 at the DNR Wallace Building in Des Moines, Iowa.

COMMISSIONERS PRESENT

Nancy Couser, Secretary
Cindy Greiman
LaQuanda Hoskins
Chad Ingels
Brent Rastetter
Bob Sinclair
Max Smith, Vice-Chair
Gene Ver Steeg

COMMISSIONERS ABSENT

Mary Boote, Chair

ADOPTION OF AGENDA

Motion was made by Brent Rastetter to approve the agenda as presented. Seconded by Bob Sinclair. Motion carried unanimously.

APPROVED AS PRESENTED

APPROVAL OF MINUTES

Motion was made by Bob Sinclair to approve the December 16, 2014 EPC meeting minutes. Seconded by Chad Ingels. Motion carried unanimously.

APPROVED AS PRESENTED

MONTHLY REPORTS

Bill Ehm shared with the Commission:

- The U.S. Army Corps of Engineers requires a level of stream mitigation if streams are damaged because of construction activities. This may include mitigation work up or downstream. The Iowa DOT has approached the DNR to assist with stream mitigation activities, including the possibility of a stream mitigation exchange.
- The DNR is reviewing its various river programs to better integrate them. About a dozen DNR and a half dozen non-DNR leaders have gathered to explore improving the programs. The end goal is for an overall plan for Iowa’s river program.
- The Jordan Aquifer rules are being drafted with DNR staff and the Stakeholder Group. After the Governor’s Office review, the rules are intended for the Commission’s review in February.
- From the December 2014 meeting, a discussion of retaining watershed coordinators is still ongoing.
- Over the past year, the Water Quality Bureau identified a need for a Water Policy Coordinator. Five candidates were interviewed and Adam Schnieders was selected.
- The press has been talking about trends with nitrates in water as a result of DMWW’s Notice of Intent to Sue. Trends are a tricky thing including when to start and stop the timeframe and how and when to measure. The devil is in the details. About a year and a half ago at SHL in Ankeny, Keith Schilling presented on nitrate trends. Keith collaborated with another U of I professor, Kung-Sik Chan, but he was not present at the meeting. Their time series statistics of the 46 river monitoring sites resulted in 80% did not show any statistical trend, 6% demonstrated an increase, and a few others showed nominal increases.

The following monthly reports have been posted on the DNR website under the appropriate meeting month:

<http://www.iowadnr.gov/InsideDNR/BoardsCommissions.aspx>

1. Rulemaking Status Report
2. Variance Report
3. Enforcement Status Report
4. Administrative Penalty Report
5. Attorney General Referrals Report
6. Contested Case Status Report

INFORMATION

DIRECTORS REMARKS

No additional comments from the Joint NRC/EPC meeting.

INFORMATION

PUBLIC COMMENT**Pat Sauer – MS4 Stormwater Education Program**

Pat Sauer shared with the Commission the proposed language changes regarding topsoil preservation are impossible for the MS4 group and DNR to enforce. The developers across the state need consistency. Homeowners are currently not complaining about the additional cost. She recommended for DNR to have a wider range of stakeholders other than developers working on these rules. She provided additional suggestions for modified rule language.

Deborah Bunka – ICCI

Deborah Bunka requested the issuance of clean water permits for hog factories. Every factory farm should be issued a clean water permit. The DNR has failed to issue a single clean water permit to a hog confinement since the September 2013 signed workplan. She summarized the number of manure spills and other violations since the work plan has been issued.

Cherie Mortice – ICCI

Cherie Mortice felt it was unfortunate that Bill Stowe at DMWW had to launch a lawsuit against 3 counties upstream to protect the water. After record corn prices, farmers should be required to have cover crops, buffer crops, and to protect the land. They want more time to hold seminars to teach practices. Best practices and voluntary practices is a failure. The Commission and DNR has failed to protect the water. Other industries are regulated to protect the water while the Ag industry is not. Voluntary compliance over decades has failed. She asked why Des Moines residents should be put at risk for having unsafe drinking water because the DNR refuses to enforce the law. She applauds Bill Stowe for moving forward to protect the drinking water of a half million rate payers.

Virginia Soelberg – Self

Virginia Soelberg shared with the Commission her interest for clean water and safeguarding topsoil. She asked if the proposed topsoil rules were clear and understandable to the cities, builders, and homeowners. She believes the proposal is convoluted and asked if there are clear guidelines for a builder to follow or a city to enforce the rule. The current rule has been in place for 2 1/2 years. She questioned if cities and homeowners have been asked if the current rules have been working for them. She asked for the Commission to consider these concerns.

Brenda Brink – ICCI

Brenda Brink stated Iowans depend on the Commission and the DNR. There are so many ways to look at trends but one is not able to ignore problems with water. There are 506 hog factory farms in the 3 counties being sued. There has been no progress since September 2011. Slaps on the wrist don't work. The fines are only issued when there is a fish kill but there should be greater concern for humans. There should be more leadership on this. DNR is not collecting fines issued and there is over \$53,000 in uncollected fines from factory farms. She asked the DNR and EPC to step up to the plate and protect the water.

Stephen Tews – ICCI

Stephen Tews stated the crap comes down to his home in southeast Iowa. Rather than meeting the Work Plan requirement of 25%, DNR only inspected 14% of the AFO universe this past year. He advocated for more manpower to perform the inspections. Desktop assessments may be part of the inspection universe but in-person inspections are way better. But onsite inspections aren't good when manure spills occur at the facility after the inspection. The stream mitigating process with the Army Corps of Engineers should be

making the streams clean. The reason you don't find dead fish in certain streams after a manure spill is because the fish are already dead.

Chris Petersen – Iowa Farmers Union

Chris Petersen wished the Commissioners a happy new year. He quoted a national hero, Theodore Roosevelt, from 115 years ago in a speech about voluntary compliance. The wheels of justice are not turning fast enough. They are getting rusty. The timeline of industry, politicians, and bureaucrats addressing this issue is unacceptable. He applauds DMWWs lighting a fire to get things moving. Clean water should be just as valuable as agricultural subsidies.

Larry Ginter – ICCI

Larry Ginter shared with the Commission that after Bill Stowe announced the lawsuit, Governor Branstad shamefully said that DMWW is waging war on farmers. Expecting farmers to maintain their land is not a statement of war. This is a human rights issue for clean water. Governor Branstad is shamefully plotting cities and rural communities against each other. He started the war in 1999 by signing AFO laws to destroy family farmers. Demanding farmers to respect the land is not injustice but a demand for justice. The idea we can test water is not working. Look at all the black dirt in my ditches. We lost a billion dollars worth of topsoil last year. Topsoil is our life blood in this state and nation. We need a strong conservation plan. He asked why isn't the Commission raising hell with farmers planting next to a creek. Family farmers aren't following the rules either.

Lee Barclay – ICCI

Lee Barclay commended Bill Stowe and wished DMWW success in its lawsuit against the 3 counties polluting the river. Governor Branstad, DNR, and EPC are doing nothing about cleaning the water. DNR is even failing to comply with the approved workplan. Farmers are polluting the water by over application of nitrogen. What farmer would over apply nitrogen if they have to buy it? In reality the excess nitrogen is from hog manure application. The dead zone in the gulf is from Iowa. China is buying hog facilities in Iowa to get pork but they don't want these facilities in China because of the manure.

Shari Hawk – ICCI

Shari Hawk expressed the importance for DNR to have a clear and accessible database so any citizen can view inspections on factory farms. Searching the database today is like searching for a needle in a hay stack. Reports are flawed, and the cost for the records requests is increasing. She asked for a transparent open communication system for inspections, fines, and manure spills.

Mary Clark – ICCI

Mary Clark shared with the Commission her home has a well where she obtains her drinking water. The Des Moines Register had an article about the danger of nitrates. \$4.8 billion is spent annually to remove nitrates nationally. DMWW spends \$4-7 thousand daily to remove nitrates from its water supply. The real dangers are not the costs. Real dangers are health affects such as blue baby syndrome, nervous system disorders, miscarriages, cancer, brain tumors, and more. According to DMWW, 3 counties have 4 times the allowed nitrate levels. Forty-four years ago, her child passed away from her consumption of water at 39 parts per million nitrates. Forty-four years after her son died, the water is still not safe for people to drink.

Chip Classon – Jerry's Homes

Chip Classon introduced himself as a member of the EO80 Stakeholder Group. He stated developers are not selling topsoil because it is infeasible. Cities are monitoring the developers. He asked the Commission to vote on the new rule as the Governor has written.

Jess Mazour – ICCI

Jess Mazour does not believe in the water trends research and bets it is industry funded. This is like the fox guarding the hen house. She conducted a Google search for manure and found a 2011 DNR report detailing the AFO program going from 23 to 8 AFO staff. The report indicated that the reduction meant the AFO program would not be able to maintain an adequate level of enforcement and compliance. The confinements are growing and staff should too. The DNR doesn't have enough staff to do its job. Polluted water ways and manure spills continue to grow. Manure needs to keep out of water. She appreciates Director Gipp acknowledging manure is a pollutant that needs to be kept out of the water. She asked the Commission to hold polluters accountable.

Creighton Cox – Home Builders Association of Greater Des Moines

Creighton Cox, Chair of the EO80 Stakeholder Group for topsoil, thanked the DNR and Commissioners for the opportunity to speak. The rules mirror the EPA rules with an extra piece to ensure that topsoil is kept in the permitted area. He asked the Commission to approve the rules provided by the Governor.

Carrie Fisher – ICCI

Carrie Fisher thanked Director Gipp for various articles and speeches with groups where he focused on clean water. Counties have concerns regarding their participation in the Master Matrix because if they deny a permit, the DNR will approve it anyway. Citizens feel powerless to the corporate owners. Counties participate in the Master Matrix because they want a say in the matter. She asked the Commission to listen to citizens because it is their only way to be involved.

James Hodina – Linn County Public Health

James Hodina, Linn County Public Health, participated in the Air Quality Funding stakeholder group. He provides his full support for the recommendations made by the group. The group's report has many recommendations, including funding by both general funds and fees. Linn County supports the funding recommendations even though the county will not benefit from the additional funding.

Written Comments Submitted

Virginia Driscoll – Against Topsoil Proposed Rules – Requests to retain rule requiring 4" of topsoil

James G – Against Topsoil Proposed Rules – Requests to retain rule requiring 4" of topsoil

Mike Joseph – Against Topsoil Proposed Rules – Requests to retain rule requiring 4" of topsoil

Patrick Bosold – Against Topsoil Proposed Rules – Requests to retain rule requiring 4" of topsoil

END OF PUBLIC COMMENT

AIR QUALITY STAKEHOLDER RECOMMENDATIONS

Jim McGraw, Supervisor of the Program Development section of the Air Quality Bureau presented the following item. He introduced the members of the Stakeholder Group who developed the recommendations. He distributed summary materials of the recommendations when explained each item. With the assistance of Catharine Fitzsimmons, Air Quality Bureau Chief, they answered questions regarding the recommended funding approaches.

INFORMATION

STATE IMPLEMENTATION PLAN REVISION FOR COUNCIL BLUFFS LEAD NONATTAINMENT AREA

Matthew Johnson, Environmental Specialist Senior of the Program Development Section of the Air Quality Bureau presented the following item.

The U.S. EPA designated a portion of Council Bluffs as a nonattainment area for lead (Pb) in 2011. The Department is revising the State Implementation Plan (SIP) to ensure the 2008 lead National Ambient Air Quality Standards (NAAQS) will be attained and maintained in the area. The Commission was requested to approve the SIP revision for preventing future violations of the lead NAAQS in Council Bluffs. Upon approval from the Commission, the SIP will be forwarded to U.S. EPA for federal notice and approval.

Reason for SIP Revision

On November 22, 2011, the U.S. EPA issued a final rule designating a portion of Pottawattamie County, Iowa, as a lead nonattainment area. The nonattainment designation occurred after EPA revisions of the lead standard in 2008 that strengthened health protections by a factor of ten while also requiring new air monitors next to larger lead sources. The revised lead NAAQS requires that 3-month rolling average lead concentrations to be at or less than 0.15 microgram per cubic meter ($\mu\text{g}/\text{m}^3$). Ambient air measurements in Council Bluffs in 2010 showed six 3-month rolling average lead values over EPA's $0.15 \mu\text{g}/\text{m}^3$ standard.

The Department must submit to EPA a revision to the SIP that demonstrates how the area will attain the lead NAAQS in a timely manner. To reduce lead concentrations in the air and satisfy federal requirements the SIP revision requires that all significant lead sources in the nonattainment area implement reasonably available control measures as quickly as possible. An air quality modeling demonstration conducted by the Department shows that the control measures will reduce lead emissions and their impacts and that the area will meet the lead NAAQS within the five year attainment deadline (December 31, 2016).

Affected Sources

The Department determined that two sources of air pollution within the Council Bluffs lead nonattainment area contribute to predicted (modeled) lead NAAQS violations of the standard in the vicinity of the lead monitor. These facilities are Griffin Pipe Products Co. LLC (Griffin Pipe) and Alter Metal Recycling.

Lead Control Strategy

Control measures providing for expeditious attainment of the lead NAAQS were developed based on air quality modeling data and facility-specific operating conditions. Alter Metal Recycling and Griffin Pipe must both reduce lead emissions associated with their haul road traffic by 90-95%. Haul road sweeping/cleaning reduces

the amount of silt on facility roadways, which testing showed contained lead. Alter Metal Recycling must also pave any unpaved road segments or discontinue their use and comply with material processing limits.

Control measures at Griffin Pipe incorporate the installation of two baghouses associated with Prevention of Significant Deterioration (PSD) permits issued before the area was designated nonattainment. New control measures were added which account for the idling of the plant in May of 2014. When pipe production operations resume at Griffin Pipe an Administrative Consent Order provides the facility with the flexibility to choose between two control options. Both options include:

- Regular sweeping/cleaning of road surfaces;
- New lead emission limits on existing sources;
- Implementing best management practices to reduce lead emissions, such as posting speed limit signs and cleaning in appropriate situations to minimize fugitive emissions.

The control strategy designated Option A can be implemented quickly should the plant resume operation. It includes limiting scrap melting operations to 1,250 hours in any 3-month rolling period and restricting the shipment of bulk materials (raw and product) between certain hours. The control strategy designated Option B requires a new baghouse to further reduce lead emissions from an existing roof vent that includes emissions from the small diameter casting process. The additional control allows for the removal of the restrictions listed above in Option A.

The control strategy is enforceable through an Administrative Consent Order with Griffin Pipe and a construction permit issued to Alter Metal Recycling. Implementation of roadway sweeping and paving activities are underway at Alter Metal Recycling and Griffin Pipe's measures (either option A or Option B) must be implemented when they resume operations.

Summary of Public Comment Activities

The public comment period for the SIP revision was held from November 20 through December 22, 2014, and included a public hearing in Council Bluffs on December 22, 2013. Minor modifications to the SIP revision document and the Administrative Consent Order with Griffin Pipe were made in response to the three written comments and one oral comment received during the comment period. The responsiveness summary for the public comment period is included with the SIP revision document.

Motion was made by Gene VerSteege to approve the agenda item as presented. Seconded by Nancy Couser. Motion carried unanimously

APPROVED AS PRESENTED

SOLID WASTE ENVIRONMENTAL MANAGEMENT SYSTEMS' GRANT AWARD RECOMMENDATIONS

Alex Moon, Bureau Chief of the Land Quality Bureau presented the following item.

The Department received eleven (11) grant applications requesting \$355,609 in financial assistance during the November 1 2014, round of funding. The review committee selected eight (8) projects for funding totaling \$298,642. Six (6) applications recommended for funding are greater than \$25,000 each, awarding a total of \$266,916. Commission approval was required for DNR to write agreements for those applications.

The review committee is made up of the Solid Waste Alternatives Program Advisory (EMS) Council (Council); a nine-member committee established in House File 2570 and Iowa Code 455J. Members are appointed by the director representing: Department of Natural Resources, Iowa Society of Solid Waste Operations, Iowa Recycling Association, Iowa Chapter of the National Solid Waste Management Association, Iowa Waste Exchange, Iowa Department of Economic Development (now Iowa Economic Development Authority) Recycle Iowa program, and three members representing Solid Waste Planning Areas of various sizes.

Contractor Selection Process

Council members scored applications for their own purposes, based on Grant Criteria set by Council. At the December 5, 2014 Council Meeting, applications were discussed and a yes/no vote was taken on each application to determine whether or not each would be funded and at what funding level.

At this time, the Department is requesting Commission approval to enter into agreements with the selected applicants. A description of these recommended projects, the project type, and the amount and type of funding assistance is attached.

The Environmental Management System Program is a voluntary program established by 2008 Legislation House File 2570 (Iowa Code 455J.7). As established in Code, grant funds are available only to Solid Waste Agencies and Permitted Facility Service Areas designated as Environmental Management Systems by the Environmental Protection Commission. Applications must be consistent with EMS goals and demonstrate a commitment to continuous improvement.

Motion was made by Brent Rastetter to approve the agenda item as presented. Seconded by LaQuanda Hoskins. Motion carried unanimously

APPROVED AS PRESENTED

NOTICE OF INTENDED ACTION, CHAPTER 64, “WASTEWATER CONSTRUCTION AND OPERATION PERMITS” AND STORM WATER GENERAL PERMIT NO. 2 FOR CONSTRUCTION ACTIVITIES – TOPSOIL PRESERVATION

Joe Griffin, Environmental Specialist Senior of the NPDES Section of the Water Quality Bureau presented the following item.

The Commission was asked to approve the attached Notice of Intended Action for Chapter 567-64 IAC “Wastewater Construction and Operation Permits” and changes to storm water General Permit No. 2. The proposed changes to Chapter 64 amend General Permit No. 2. The changes to General Permit No. 2 implement the recommendations of an Executive Order 80 stakeholders’ group regarding topsoil preservation.

The current requirement is that if 4 inches or more of topsoil existed prior to development, a minimum of 4 inches is to be in place on the surface of the site after construction is complete unless land use precludes the practice. The proposed requirement is that the permittee(s) shall, unless infeasible, preserve topsoil. “Infeasible” shall mean not technologically possible, or not economically practicable and achievable in light of the best industry practices as determined by the permittee. “Unless infeasible, preserve topsoil” shall mean that, unless infeasible, topsoil from any areas of the site where the surface of the ground for the permitted construction activities is disturbed, shall remain within the area covered by the applicable General Permit No. 2. Soil may be used elsewhere in the development and no minimum retention requirement is applicable to an individual lot or portion of the project.

A public comment period will begin after publication in the Iowa Administrative Bulletin. The Department intends to conduct public hearings in Des Moines, Cedar Rapids and Davenport to solicit public comments.

Motion was made by Chad Ingels to approve the agenda item as presented. Seconded by Gene VerSteeg. 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 #4)

Roger Bruner, Supervisor of the Water Monitoring Section of the Water Quality Bureau presented the following item.

The commission was asked to approve a Notice of Intended Action regarding proposed rulemaking to amend the recreational and warm water aquatic life use designations for approximately 83 river and stream segments. The individual Use Assessment and Use Attainability Analysis (UA/UAA) for these segments listed in the NOIA are available on the DNR's web site at: <http://programs.iowadnr.gov/uaa/search.aspx>

Rulemaking combined with legislative action in 2006 established 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 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". An integral part of implementing the state's water quality rules is determining whether a stream is capable of supporting the presumed uses.

The concept of 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.

Motion was made by Cindy Greiman to approve the agenda item as presented. Seconded by Bob Sinclair. Motion carried unanimously

APPROVED AS PRESENTED

EPC ANNUAL REPORT

Nancy Couser, Secretary of the Environmental Protection Commission presented the following item.

Commissioner Couser reviewed the proposed annual report with the Commissioners. She noted an update to the assessed fines from \$77,215 as originally written to \$421,350.

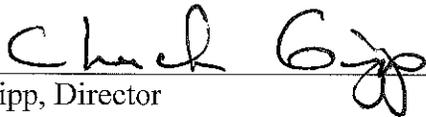
Motion was made by Gene VerSteege to approve the agenda item as amended with the updated assessed fines to \$421,350. Seconded by Brent Rastetter. Motion carried unanimously

APPROVED AS AMENDED

GENERAL DISCUSSION

- Commissioners discussed various approaches and avenues to share their 2014 Annual Report.
- ISU will be presenting educational information during the February 2015 EPC meeting regarding AFO odor.

Vice Chairperson Smith adjourned the Environmental Protection Commission meeting at 3:00 p.m., Wednesday, January 21, 2015.



Chuck Gipp, Director



Nancy Couser, Secretary

Sheets, Jerah [DNR]

From: Driscoll, Virginia D <virginia-driscoll@uiowa.edu>
Sent: Saturday, January 17, 2015 8:38 AM
To: Sheets, Jerah [DNR]
Subject: Topsoil rule

Good morning,

I am writing to request the EPC retain the rule requiring that 4" of topsoil remains on the site after construction. The maintenance of our land and the reduction of run-off are infinitely more important than the finances of builders who have lobbied to repeal this requirement. This requirement needs to remain so that yards can grow grass and trees and absorb rainfall; thereby reducing flooding and pollution. I thank you for your time.

Respectfully,
Virginia

[Virginia D Driscoll](#), MA, MT-BC

Research Specialist for Kate Gfeller, PhD: Music Perception Team

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Sheets, Jerah [DNR]

From: James G <jmsg07@gmail.com>
Sent: Friday, January 16, 2015 11:07 PM
To: Sheets, Jerah [DNR]
Subject: 4" topsoil rule

It seems obvious to me that homeowners in a state known for its good land could expect to have a yard that would grow grass. I find it repulsive that builders/developers are so lazy/greedy that they deem this too difficult.

I urge you to keep the rule. If it is truly too burdensome, allow an alternate option of providing a highly visible disclaimer(yard sign?) that the property has been stripped of topsoil and will not perform the normal functions of a lawn, including growing healthy grass and plantings and absorbing rainfall to reduce flooding.

Sheets, Jerah [DNR]

From: Mike Joseph <mike_joseph21@yahoo.com>
Sent: Friday, January 16, 2015 9:52 PM
To: Sheets, Jerah [DNR]
Subject: Topsoil

Jerah,

I understand we are to email you concerning topsoil on new construction homes. We moved in December of 2011 so we may be out of luck. However I had our soil tested and that is exactly what happened. Our lot use to be a farm and our soil was stripped down to the clay and now we have no top soil and every spring when the snow melts and when it rains we have water sitting for days. Also all my neighbors lawns slope to towards mine and they also have their topsoil removed during construction.

I live in North Liberty and this is very common problem here. I have a coworker that has a lawsuit against the city currently for this reason and also for not plugging an old field tile that leads to his house.

Anyway not sure if anything will come out of this but at least you have another story of new homeowners being taken advantage of.

Thank you!

~~/)~~~

~~~/)~~Fins Up!!

Michael Joseph

## Sheets, Jerah [DNR]

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**From:** Bosolds <bosolds@lisco.com>  
**Sent:** Monday, January 19, 2015 7:30 PM  
**To:** Sheets, Jerah [DNR]  
**Subject:** comment for EPC on adoption of a new topsoil rule - I am opposed

Dear Jerah Sheets,

This is a comment for the Environmental Protection Commission (EPC) for its meeting on Wednesday, January 21, 2015. I will not be able to attend the meeting in-person to make a comment.

My comment regards the proposed new topsoil rule. I am opposed to the proposed new rule, and to any changes that reduce the requirements specified in the current rule, which calls for preservation of existing topsoil, up to 4". If anything, we should be increasing that number, not reducing it.

As an undeveloped area is changed to urban, commercial, or industrial use, natural cover is removed and the chance of erosion problems increases. The topsoil contains organic matter that absorbs water and reduces runoff to local streams as well as provides that water and nutrients to sustain a lawn. To establish healthy landscapes (lawn, gardens, native plantings, trees and shrubs), improve on-site storm water retention, lessen runoff and soil erosion, and improve water quality - we need to retain four inches of healthy soil, at a minimum.

There is much more that I could say to the EPC commissioners on this topic. I'll leave it at this: if you can't make it any better or stronger (i.e. increase topsoil requirements), then leave this rule alone.

Sincerely,

Patrick Bosold  
202 N. 5<sup>th</sup> St.  
Fairfield, IA 52556  
tel 641-472-1691, mobile 641-919-8895  
email [bosolds@lisco.com](mailto:bosolds@lisco.com)



# IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

**Air Quality Stakeholder Group  
Recommendations**  
Environmental Protection Commission Meeting  
January 21, 2015

## Overview

- Background
- Air Quality funding concerns
- Stakeholder Group strategy for recommendations
- Stakeholder Group recommendations
- Questions & discussion

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## Background

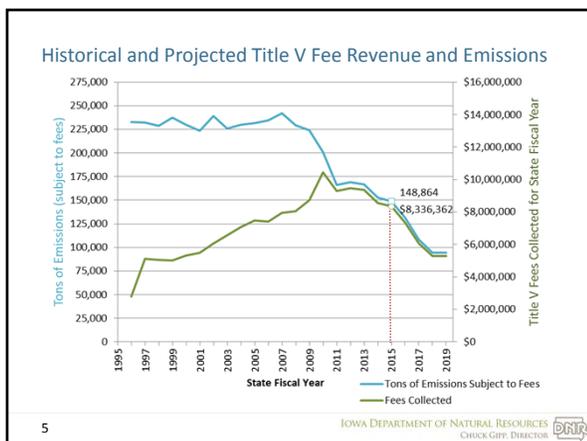
- Iowa General Assembly (House File 2473, IA GA 85) directed the DNR to convene a stakeholder group.
- Purpose: study funding of the air quality programs administered by the department.
- Members developed recommendations for funding the air quality program for next year and beyond (FY19).
- Findings and recommendations submitted to the General Assembly in December 2014.

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CHUCK GIFF, DIRECTOR 

## Background Cont.

- Thirty representatives from large and small Iowa businesses, associations, local governments, and environmental interests.
  - Selected by Director with IGOV input
  - Alternates for each primary representative
- Met for six days over five months.
  - July to November 2014
- Independent facilitator selected by DNR.
- DNR provided technical and administrative support.

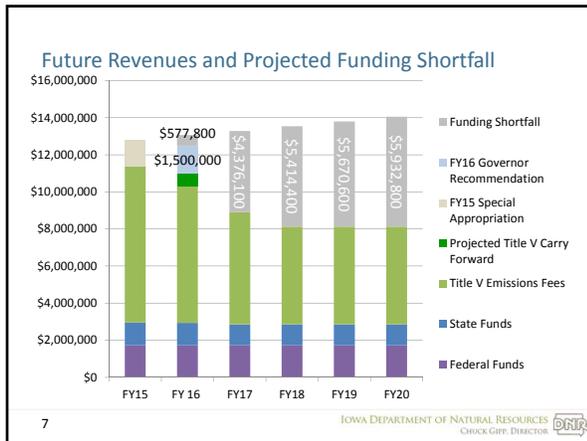
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CHUCK GIFF, DIRECTOR 



## Savings and Efficiencies

- Cost savings of over \$2.2 million since 2008
  - Staff and contract reductions
  - Reduced fleet expenses
  - Reduced IT equipment and office expenses
- Process improvements and streamlining
  - Construction permitting
    - Six Kaizen events since 2003
    - Streamlining forms and instructions (2014-15)
  - Title V permitting
    - One Kaizen event (2012)
    - Elimination of VOP program
    - Assist sources in exiting program (2014-15)
  - Support services
    - On-line calculators, increased webinar training, updated permit templates & registrations, increased data availability

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CHUCK GIFF, DIRECTOR 



- ### Air Quality Funding Concerns: Summary
- Title V fee revenue is declining due to reductions in air pollution emissions that are the foundation of the current funding mechanism for the Bureau.
  - Federal funding is stagnant and not providing for the increased programmatic costs.
  - Demand for services from the bureau continue to grow.
  - The Bureau continues to look for cost savings and methods to reduce our expenditures on non-value added activities.
  - To continue to provide the same level of service additional funds will be needed.
- 8 IOWA DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIFF, DIRECTOR



- ### Stakeholder Group Strategy for Recommendations Cont.
1. The Bureau should have a funding structure that provides a sustainable future as regulations change.
  2. Funding solutions should be fair to stakeholders, transparent and easily understood.
  3. Fees should be deposited into a dedicated fund. Unspent funds should carry forward into the next fiscal year to provide resources for future requirements.
- 10 IOWA DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIFF, DIRECTOR

- ### Stakeholder Group Strategy for Recommendations Cont.
4. When a service is directly traceable to users or beneficiaries, those users or beneficiaries should pay part of the cost through fees.
  5. The Title V permit program should be self-sustaining through the payment of fees by Title V permit holders.
- 11 IOWA DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIFF, DIRECTOR

- ### Stakeholder Group Recommendations: Create an Air Quality Fee Fund
- Create a dedicated fund for the new user fees.
  - Funds should carry forward and not revert to the General Fund.
  - Funds should not be diverted to another program.
- 12 IOWA DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIFF, DIRECTOR

### Stakeholder Group Recommendations: More State Funds for Air Quality

- The State of Iowa should invest in air quality:
  - Iowa citizens are the primary beneficiaries.
  - The program is under funded in comparison to similar programs in other states and environmental programs within DNR.
- State monies should fund the anticipated shortfall in fiscal year (FY) 2016
- An additional \$2,000,000 should be appropriated each year.

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### Stakeholder Group Recommendations: Establish Fees by Rule

- Implement fees for services:
  - Permitting and dispersion modeling fees.
    - Larger sources would pay 100% of cost.
    - Smaller sources would pay 40% of cost.
  - Asbestos notification fee.
- Fee amounts would be set up through rulemaking.
  - Title V fee to remain at the current level.
- Major source and minor source stakeholder groups would establish fee schedule.
  - Both meet annually to evaluate fee structures.

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### Stakeholder Group Recommendations: Continue to...

- Track Bureau expenses in a detailed manner.
- Streamline and improve processes to provide services efficiently & seamlessly.
- Authorize & obtain special appropriation to implement upcoming federal regulations and/or new capital costs when finalized.
  - SO2 and Ozone NAAQS
  - SPARS replacement (new capital cost)

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### Stakeholder Group Recommendations: Reassign Costs

| Cost Item                                                            | Prior source of funding | Proposed source of funding                   | Approximate dollar value |
|----------------------------------------------------------------------|-------------------------|----------------------------------------------|--------------------------|
| <b>Title V Application review and Permit Issuance</b>                | Title V emission fees   | Title V permit application fees              | \$1.1 million            |
| <b>Title V backlog response</b>                                      | Previously unfunded     | Title V emissions fees                       | \$120,000                |
| <b>Major source application review, modeling and permit issuance</b> | Title V emission fees   | Major source permit issuance fees            | \$1.1 million            |
| <b>PSD Application review, modeling and permit issuance</b>          | Title V emission fees   | PSD permit issuance fees                     | \$340,000                |
| <b>Minor Source application review, modeling and permit issuance</b> | General Fund            | Minor source fees (40%) & General Fund (60%) | \$570,000                |
| <b>Ambient monitoring – population centers</b>                       | Title V emission fees   | General Fund                                 | \$1.4 million            |
| <b>Ambient monitoring – PSD background levels and transport</b>      | Title V emission fees   | General Fund                                 | \$360,000                |
| <b>Source oriented monitors</b>                                      | Title V emission fees   | General Fund                                 | \$455,000                |
| <b>Asbestos inspections</b>                                          | SWAP                    | Inspection fee for users                     | \$130,000                |

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### Stakeholder Group Proposal: FY 2016-2019 Revenue



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### Summary

- Reductions in emissions have led to declining Title V fee revenues.
- Federal funding is stagnant and does not provide for increased program costs.
- Demand for services continues to grow.
- Cost savings and operational efficiencies have been undertaken.
  - Continue to look for ways to reduce costs for non-value added activities
- Additional funds are needed to continue to provide same level of services.
- Stakeholder Group recommended bureau have a sustainable funding structure.
  - Additional State investment in air quality
  - Implement fees for services

18

Questions & Discussion

- Catharine Fitzsimmons
  - [catharine.fitzsimmons@dnr.iowa.gov](mailto:catharine.fitzsimmons@dnr.iowa.gov)
  - 515-725-9534
- Jim McGraw
  - [jim.mcgraw@dnr.iowa.gov](mailto:jim.mcgraw@dnr.iowa.gov)
  - 515-725-9543



# ASSESSING IOWA STREAM USES

ENVIRONMENTAL SERVICES DIVISION | [WWW.IOWADNR.GOV](http://WWW.IOWADNR.GOV)

To establish goals and levels of protection for Iowa's water, the Iowa DNR – in compliance with the federal Clean Water Act – assigns designated uses to each river and stream in Iowa.

“Water quality standards are essentially the goals for Iowa’s waters,” said Rochelle Weiss, a DNR environmental specialist. “Use designations are one part of the standards, and they help us categorize water bodies by what they’re used for – recreation, aquatic life, drinking water or a combination of those. These designated uses help direct the level of protection afforded to a water body.”



## Rebuttable Presumption

Under current state rules, and in order to maintain compliance with the Clean Water Act, it is presumed all perennial streams and rivers are attaining the highest level of recreational and aquatic life uses and should be protected for uses such as swimming and fishing. This concept of assigning all perennial streams the highest use designation, unless an assessment shows the stream is unable to support those uses, is referred to as the “rebuttable presumption.” When this rule was first put in place in Iowa in 2006, this applied protections immediately to 26,000 miles of Iowa streams. Included in the federal regulations and state rules, provisions do allow for site-specific scientific analysis of these “presumed” recreational and aquatic life uses.

## Use Attainability Analysis (UAAs)

There are many types and sizes of streams in Iowa, and some, particularly in agricultural regions of the state, may not be capable of supporting the presumed uses. An integral part of assessing a stream is verifying the appropriate designation to apply to a stream. The DNR applies the concept of Use Assessment and Use Attainability

Analysis (UA/UAA, or UAA) 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.

## Who needs UAAs

If a facility needs a National Pollutant Discharge Elimination System (NPDES) discharge permit as required by the federal Clean Water Act, the DNR will complete a UAA for the receiving stream or stream network before issuing the permit.

When these facilities are identified through permit applications or from other outside requests, the DNR places them on a workload book. This starts the process for facilities that tracks what stream segments need a UAA.

## Timelines

The DNR tracks requested UAAs to plan its seasonal field work, create a project schedule and determine resources needed. Staff also consider stream flow, weather and stream conditions when scheduling field work. Streams may only be assessed under “base flow conditions,” when recreational use or aquatic life conditions are the most representative. It cannot be completed during elevated flow or drought conditions. Recreational use assessments may only be conducted from March 15 to Nov. 15, and aquatic life use assessments may only be completed from July 1 through Sept. 30.

## Components of UAAs

The first step in the UAA process is gathering field data in and along streams. These data, which detail physical features of the stream and determine recreational and aquatic life uses happening in the waterbody, are collected at base stream flow conditions. The DNR uses scientifically-based field procedures for the assessments.

## Gathering data

The DNR considers a number of factors when conducting an assessment. Staff collect existing data from

### MATTHEW DVORAK

DNR Water Quality Standards

515-725-8397

[matthew.dvorak@dnr.iowa.gov](mailto:matthew.dvorak@dnr.iowa.gov)

[www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterQualityStandards.aspx](http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterQualityStandards.aspx)

Waters of the state are classified for protection of beneficial uses. These classified waters include designated uses and general uses.

**General Use:** Intermittent waters flowing only for short periods, are above the water table, and do not maintain viable aquatic community or pooled conditions during periods of no flow.

**Designated Uses:** Waters maintain flow throughout year or sufficient pools during intermittent flow to maintain viable aquatic community. Designated uses are shown below:

- **Class A1 - Primary contact recreational use:**

The water's recreation uses involve full body immersion with prolonged and direct contact with the water, such as swimming and water skiing.

- **Class A2 - Secondary contact recreational use:** Water recreation uses involve incidental or accidental contact with the water, where the probability of ingesting water is minimal, such as fishing and shoreline activities.

- **Class A3 - Children's recreational use:**

Water recreation uses where children's activities are common, like wading or playing in the water. These waters are commonly located in urban or residential areas where the banks are defined and there is visible evidence of flow.

- **Class B(WW-1)** - Typically large interior and border rivers and the lower segments of medium-size tributary streams capable of supporting and maintaining a wide variety of aquatic life, including game fish.

- **Class B(WW-2)** - Typically smaller, perennially flowing streams capable of supporting and maintaining a resident aquatic community, but lack the flow and habitat necessary to fully support and sustain game fish populations.

- **Class B(WW-3)** - Intermittent stream with non-flowing perennial pools capable of supporting and maintaining a resident aquatic community in harsher conditions. These waters lack the flow and habitat necessary to fully support and sustain a game fish population.

- **Class B(CW-1)** - Waters in which temperature and flow are suitable for the maintenance of a variety of coldwater species, including populations of trout (Salmonidae) and associated aquatic communities.

- **Class B(CW-2)** - Waters including small, channeled streams, headwaters, and spring runs that possess natural coldwater attributes of temperature and flow. Do not support populations of trout (Salmonidae), but may support vertebrate and invertebrate organisms.

- **Class HH** - Human Health: Waters in which fish are routinely harvested for human consumption or waters both designated as public water supply and routinely harvested for human consumption.

- **Class C** - Drinking Water Supply: Waters which are used as a raw water source of potable water supply.

the Drought Monitor, U.S. Geological Survey (USGS) stream gauges on stream flow, the National Oceanic and Atmospheric Administration (NOAA) on rain patterns and USGS topographic maps and aerial photos, among others.

At the site, staff take depth measurements, assess the stream for aquatic life and game fish conditions, and take photos. They also look for signs of recreation on and around the stream and talk to nearby residents about how people use the stream. If no one is present to interview, DNR staff leave a postcard behind with a few simple questions. They also look at maps of the area and other references to look for the presence of parks, schools and other potential recreational uses. After compiling all this data and creating stream and site maps, staff create a UAA report for the recreational uses and aquatic life uses as required and as applicable.

## After the assessment

These completed UAA reports are initially sent to the facility. A meeting may be requested by the facility to discuss the determinations. The UAAs are entered into the UA/UAA database so the facility and public may see relevant site documents. The recommended aquatic life and/or recreational use designations for a receiving stream or river will be noted in each UAA report in detail. (Descriptions of designated uses are listed in the box at left.)

After considering new information from the facility or the public, and where appropriate, after modifications to the recommended use designations are made based on that information, the DNR begins formal rulemaking to incorporate amendments to the stream or river's use designation. Formal rulemaking is required because any amendment is a change in the waterbody's use designation(s), which is specifically listed in DNR rules (IAB 455b, Chapter 61).

The rulemaking process includes a public notice published in the Iowa Administrative Bulletin and various public hearings across the state to receive written and oral comments. DNR staff prepare a Responsiveness Summary of all comments received during the public notice period and post it at [www.iowadnr.gov](http://www.iowadnr.gov).

Following the public notice process, the Environmental Protection Commission takes formal action on the rules and submits them to EPA for formal approval. The entire UA/UAA posting to EPA approval process takes about 10 to 12 months.

If the findings verify the assessed stream is a general use stream, only flowing intermittently (not perennially or with an intermittent flow with perennial pools), rulemaking is not required.

# Agenda

## Environmental Protection Commission

Wednesday, January 21, 2015  
DNR Wallace State Office Building  
502 East 9<sup>th</sup> Street  
Des Moines, Iowa

### Tuesday, January 20<sup>th</sup>

6:00 PM – Optional Dinner – Governor’s Lounge Quality Inn 929 3<sup>rd</sup> St, Des Moines

### Wednesday, January 21<sup>st</sup>

7:30 AM – Legislative Meet & Greet – Capitol Cafeteria, Des Moines

10:00 AM – NRC/EPC Joint Meeting (Informational) – DNR 502 East 9<sup>th</sup> Street, 5<sup>th</sup> floor, Des Moines

1:30 PM – EPC Business Meeting – DNR 502 East 9<sup>th</sup> Street, 2<sup>nd</sup> floor, Des Moines

Public Participation<sup>1</sup> – Requests to speak during the business meeting Public Participation must be submitted to Jerah Sheets at [Jerah.Sheets@dnr.iowa.gov](mailto:Jerah.Sheets@dnr.iowa.gov), 502 East 9<sup>th</sup> Des Moines, IA 50319, 515-313-8909, or in-person by the start of the business meeting. Please indicate who you will be representing (yourself, an association, etc.), the agenda item of interest, and your stance of For, Opposed, or Neutral.

If you are unable to attend the business meeting, comments may be submitted via mail and email for the public record. The Commission encourages data, reports, photos, and additional information provided by noon the day before the meeting to allow ample time for review and consideration.

|    |                                                                                                                                                                                |                               |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 1  | Approval of Agenda                                                                                                                                                             |                               |
| 2  | Approval of Minutes                                                                                                                                                            |                               |
| 3  | Monthly Reports                                                                                                                                                                | Bill Ehm<br>(Information)     |
| 4  | Director’s Remarks                                                                                                                                                             | Chuck Gipp<br>(Information)   |
|    | Public Participation                                                                                                                                                           |                               |
| 5  | Air Quality Stakeholder Recommendations                                                                                                                                        | Jim McGraw<br>(Information)   |
| 6  | State Implementation Plan Revision for Council Bluffs Lead Nonattainment Area                                                                                                  | Matthew Johnson<br>(Decision) |
| 7  | Solid Waste Environmental Management Systems’ Grant Award Recommendations                                                                                                      | Alex Moon<br>(Decision)       |
| 8  | Notice of Intended Action, Chapter 64, “Wastewater Construction and Operation Permits” and Storm Water General Permit No. 2 for Construction Activities – Topsoil Preservation | Joe Griffin<br>(Decision)     |
| 9  | Notice of Intended Action – Chapter 61 – Water Quality Standards (Stream Reclassifications via Use Assessment and Use Attainability Analyses – Batch #4)                       | Alex Moon<br>(Decision)       |
| 10 | EPC Annual Report                                                                                                                                                              | Nancy Couser<br>(Decision)    |
| 11 | General Discussion                                                                                                                                                             |                               |
| 12 | Items for Next Month’s Meeting                                                                                                                                                 |                               |

- February 17, 2015 – EPC Business Meeting, Windsor Heights
- March 17, 2015 – EPC Business Meeting, Windsor Heights

For details on the EPC meeting schedule, visit  
<http://www.iowadnr.gov/InsideDNR/BoardsCommissions.aspx>

<sup>1</sup> Comments during the public participation period regarding proposed rules or notices of intended action are not included in the official comments for that rule package unless they are submitted as required in the Notice of Intended Action.

Monthly Variance Report  
November 2014

| Item No. | Facility/City             | Program              | DNR Reviewer        | Subject                                                                                                                                                              | Decision | Date       |
|----------|---------------------------|----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|
| 1        | Cherokee City of STP      | Wastewater           | Ben Hucka           | reduce testing at treatment plant                                                                                                                                    | approved | 8/22/2014  |
| 2        | Eldora City of STP        | Wastewater           | Ben Hucka           | variance from operational monitoring frequencies & locations for TSS from drafted permit to those required in previous NPDES permit.                                 | approved | 8/19/2014  |
| 3        | Oelwein City of STP       | Wastewater           | Anne Hildebrand     | variance from activated sludge and SBR operational monitoring in previous draft.                                                                                     | approved | 11/3/2014  |
| 4        | City of Manson            | Wastewater           | Marty Jacobs        | variance from design standards for installing 6-inch cleanout in place for manholes in constricted location and installing gravity sewers with slope less than 0.40% | approved | 11/3/2014  |
| 5        | City of Lyton             | Water Supply Const   | Robert Campbell     | Expanding existing treatment plant and requesting emergency power not be required.                                                                                   | approved | 11/13/2014 |
| 6        | Alliant Energy            | Air Quality          | Dennis Thielen      | variance to conducting PM/CEM correlation curve testing                                                                                                              | denied   | 11/18/2014 |
| 7        | City of Iowa City         | Wastewater           | Marty Jacobs        | variance from design standards for installing gravity sewer by directional boring                                                                                    | approved | 11/19/2014 |
| 8        | Louis Dreyfus Commodities | Air Quality          | Reid Bermel         | variance to temporarily operate fermentation scrubber at lower rate of allowable water flow per construction permit without first obtaining modified permit.         | approved | 11/21/2014 |
| 9        | City of Anamosa STP       | Wastewater Operation | Monitoring location | request to reduce/eliminate some of monitoring locations from operation monitoring requirements                                                                      | approved | 11/24/2014 |

Monthly Variance Report  
December 2014

| Item No. | Facility/City                                         | Program               | DNR Reviewer  | Subject                                                                                                                                                                          | Decision | Date       |
|----------|-------------------------------------------------------|-----------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|
| 1        | Archer Daniels Midland Co                             | Air Quality           | Reid Bermel   | variance to increase stack height of EP 58-1 and replace Fibersol Spray Dryer Burner prior to obtaining modified construction permit                                             | approved | 12/2/2014  |
| 2        | Council Bluffs City of STP                            | Wastewater Operations | Ben Hucka     | requesting that monitoring that's required in each of 4 basins be collected at one location after streams from each basin are recombined                                         | approved | 12/3/2014  |
| 3        | Valero Renewable Fuels Albert City                    | Air Quality           | Ann Seda      | variance to store un-denatured ethanol or denatured ethanol in storage tanks that are described as denatured ethanol storage tanks without first obtaining permit modifications. | approved | 12/17/2014 |
| 4        | Ajinomoto Heartland Inc                               | Air Quality           | Reid Bermel   | variance to operate dryer prior to obtaining permit                                                                                                                              | approved | 12/17/2014 |
| 5        | City of Ida Grove 7th Street Bridge over Badger Creek | Flood Plains          | Chad Billings | variance to Q50 maximum design flow rate 3 feet freeboard requirement for bridge replacement project.                                                                            | approved | 12/22/2014 |
| 6        | City of Manning                                       | Flood Plains          | Karen Smith   | variance to freeboard criterion that low chord of bridge must be set 3 feet above 50-year flood elevation.                                                                       | approved | 12/22/2014 |

**DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION COMMISSION  
ATTORNEY GENERAL REFERRALS  
January, 2015**

| Name, Location and Region Number                                            | Program                        | Alleged Violation                                                                                                               | DNR Action                      | New or Updated Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Date                                                                                                                                                       |
|-----------------------------------------------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BCB Ag, LLC<br>Inwood (3) <b>UPDATED</b>                                    |                                | Uncertified Applicator;<br>Lack of Signage for<br>Manure Service on<br>Vehicle                                                  | Referred to<br>Attorney General | Referred<br>Petition Filed<br>State's Motion for Default Judgment<br>Order Granting Default Judgment<br>(\$35,000/Civil; Injunction)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4/15/14<br>7/29/14<br>9/15/14<br>9/15/14                                                                                                                   |
| Hoffman, Matt<br>Hinton (3) <b>UPDATED</b>                                  | Animal<br>Feeding<br>Operation | Failure to Submit MMP<br>and Fees                                                                                               | Referred to<br>Attorney General | Referred<br>Petition Filed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4/15/14<br>12/03/14                                                                                                                                        |
| Kossuth County (2)                                                          | Animal<br>Feeding<br>Operation | DNR Defendent                                                                                                                   | Defense                         | Petition for Judicial Review<br>State's Answer<br>P&J Pork Motion to Intervene<br>Order Granting Motion to Intervene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9/18/14<br>10/08/14<br>11/07/14<br>11/20/14                                                                                                                |
| North Central Iowa Regional SWA<br>Fort Dodge (2)                           | Solid Waste                    | Operating Permit<br>Violations                                                                                                  | Referred to<br>Attorney General | Referred                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 9/17/13                                                                                                                                                    |
| North Iowa Area Solid Waste Agency<br>Sheldon (3)                           | Solid Waste                    | Unapproved Leachate<br>Collection System                                                                                        | Referred to<br>Attorney General | Referred<br>Petition Filed<br>Answer<br>Third Party Petition Against<br>Elliot Waddell and Five States<br>Engineering, PLC<br>State's Resistance to Demand for<br>Jury Trial<br>Hearing Regarding Jury Trial Demand<br>Ruling Denying Jury Demand<br>Motion to Clarify Ruling<br>Nunc Pro Tunc Order<br>Jury Demand Allowed for 3 <sup>rd</sup><br>Party Defendant<br>State's Motion to Strike or Sever<br>3 <sup>rd</sup> Party Petition<br>Resistance to Motion to Strike<br>Application for Default Judgment<br>Order Granting Default Judgment<br>Against 3 <sup>rd</sup> Party Defendant<br>Trial Date | 1/15/13<br>9/26/13<br>10/11/13<br>10/11/13<br>10/23/13<br>11/25/13<br>1/17/14<br>1/23/14<br>1/28/14<br>2/11/14<br>2/24/14<br>3/12/14<br>3/13/14<br>3/31/15 |
| Peeters Development Co., Inc.; Mt. Joy<br>Mobile Home Park<br>Davenport (6) | Wastewater                     | Monitoring/Reporting;<br>Compliance Schedule;<br>Discharge Limits;<br>Operation Violations;<br>Certified Operator<br>Discipline | Referred to<br>Attorney General | Referred                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3/18/14                                                                                                                                                    |
| Pet Memories, Inc.<br>Warren Co. (5)                                        | Solid Waste                    | Judicial Review                                                                                                                 | Defense                         | Petition Filed<br>Answer<br>Hearing Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2/05/14<br>3/05/14<br>1/21/15                                                                                                                              |

**DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION COMMISSION  
ATTORNEY GENERAL REFERRALS  
January, 2015**

| <b>Name, Location and<br/>Region Number</b> | <b>Program</b> | <b>Alleged Violation</b> | <b>DNR Action</b>               | <b>New or<br/>Updated Status</b> | <b>Date</b> |
|---------------------------------------------|----------------|--------------------------|---------------------------------|----------------------------------|-------------|
| Scallon, Jim<br>Austinville (2)             | Solid Waste    | Illegal Disposal         | Referred to<br>Attorney General | Referred                         | 5/20/14     |

**DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION COMMISSION  
CONTESTED CASES**

January, 2015

| <b>DATE RECEIVED</b> | <b>NAME OF CASE</b>                              | <b>F.O.</b> | <b>ACTION APPEALED</b>    | <b>PROGRAM</b> | <b>ASSIGNED TO</b> | <b>STATUS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|--------------------------------------------------|-------------|---------------------------|----------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11/27/01             | Dallas County Care Facility                      | 5           | Order/Penalty             | WW             | Hansen             | 10/03 – Letter to County attorney regarding appeal resolution. 1/04 – Letter to attorney regarding appeal. 4/04 – Dept. letter to attorney regarding appeal. 9/04 – Dept. letter to attorney regarding appeal. 6/26/07 – Appeal resolved. Facility connected to City WWTF. Consent order to be issued. 1/29/13 – Order amendment drafted. Amendment issued 12/30/14. Penalty waived. Case closed.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 10/29/09             | Harlan Rudd; Karen Rudd; dba Rudd Brothers Tires | 6           | Order/Penalty             | UT             | Brees              | Informal negotiation. CADR was submitted, partially rejected with options. Settlement letter sent 2/24/10.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2/25/10              | Higman Sand & Gravel Inc.                        | 3           | Order/Penalty             | FP             | Clark              | 6/13/14 – Higman President agrees to have its engineer document completion of mitigation work and to pay penalty in Order upon his return to Iowa and execution of consent amendment to Order. 10/30/14 – DNR receives Higman documentation of mitigation completion. 11/19/14 – DNR submits draft Consent Amendment to Order for Higman signature. Consent Amendment issued 12/16/14. Penalty received. Case closed.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3/11/10              | Bondurant, City of                               | 5           | Order/Penalty             | WW             | Hansen             | 7/2013-On hold pending further investigation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 12/29/10             | Griffin Pipe Products Co., Inc.                  | 4           | Permit Conditions         | AQ             | Preziosi           | Settled. Case closed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1/31/11              | Griffin Pipe products Co., Inc.                  | 4           | Tax Certification Request | AQ             | Preziosi           | Settled. Case closed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2/28/11              | Manson, City of                                  | 3           | Order/Penalty             | WS             | Hansen             | 4/1/11 – Settlement conference held with City. 6/22/11- Settlement offer received from City attorney. 6/28/11- More information requested from City attorney concerning the settlement proposal. 11/29/11- Settlement meeting with City regarding new well project. 12/2011 – City proceeding with project. 6/2012- Contractor worked on new well to remove debris in well. Test pump to be installed to do test of well capacity. 07/2012- City to abandon new well and select new site for well to increase PWS capacity. 10/2012- Water plant work to be done week of 12/10/12. 5/2013- New well project & appeal on hold, pending USDA funding decision. 6/2/13 – USDA funding decision received. 6/26/13 – New bid date for well project. . 7/2013- Tentative schedule for new well received from City’s engineer. 8/13 – Drilling on test |

**DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION COMMISSION  
CONTESTED CASES**

January, 2015

| DATE RECEIVED | NAME OF CASE                                               | F.O. | ACTION APPEALED            | PROGRAM | ASSIGNED TO | STATUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|------------------------------------------------------------|------|----------------------------|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               |                                                            |      |                            |         |             | well begun by contractor. 9/13 – Test well not productive, new well site approved by Dept. New test well to be drilled. 10/13- Test well drilled but not successful. Test well abandoned. City Council to decide on next step. 1/24/14 – City’s engineer sent revised construction schedule for another test well and production well. 5/23/14- Test well drilled but not successful. City Council to determine next step. 6/20/14- Letter sent to City requesting plan of action and schedule by 8/30/14 for returning to compliance with order. 8/29/14 – New schedule received from City, to be incorporated into proposed consent amendment. |
| 8-27-12       | Ag Processing, Inc.; Sergeant Bluff                        | 4    | Permit Conditions          | AQ      | Preziosi    | Met with appellant 1/31/14. Met with appellant 3/12/14. Negotiations continuing. Appellant to submit further information in April. Settled in concept. Last communication with appellant on 5/22/14. Communication from appellant 7/22/14. Internal meeting 9/5/14. <b>Letter sent to appellant 12/14 proposing terms of settlement.</b>                                                                                                                                                                                                                                                                                                         |
| 11-21-12      | Ag Processing Inc.                                         | 6    | Permit Conditions          | AQ      | Preziosi    | Continuing negotiations. Last communication with appellant on 5/20/14. Communication from appellant 7/22/14. Internal meeting 9/5/14. <b>Letter sent to appellant 12/14 proposing terms of settlement.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 3-04-13       | Anderson Excavating Co., Inc.                              | 4    | Order/Penalty              | SW      | Tack        | Landfill closure underway. Settlement will occur after closure. Inspection on 8/20/14. Closure to be completed this fall.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6-10-13       | Mike Jahnke                                                | 1    | Dam Application            | FP      | Schoenebaum | Hearing held 7/30/14. ALJ upheld the permit issued by the Department.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 10-28-13      | Regional Environmental Improvement Commission/Iowa Co. SLF | 6    | Variance                   | WW      | Tack        | REIC meeting with WES on 6/17/14. Facility plan submitted 8/29/14. Antidegradation analysis needed next.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 1-02-14       | P & J Pork, LLC                                            |      | Construction Permit Denial | AFO     | Clark       | 6/10/14 – Proposed decision affirming DNR permit denial. 6/18/14 – P & J Pork appeals proposed decision. 8/19/14 – EPC reverses proposed decision. 9/18/14 – Intervenor, Kossuth County, files Petition for Judicial Review in Kossuth County.                                                                                                                                                                                                                                                                                                                                                                                                   |
| 1/16/14       | Council Bluffs Water Works                                 | 4    | Permit Conditions          | WW      | Tack        | Hearing set for March 5, 2015.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION COMMISSION  
CONTESTED CASES**

January, 2015

| <b>DATE RECEIVED</b> | <b>NAME OF CASE</b>                              | <b>F.O.</b> | <b>ACTION APPEALED</b> | <b>PROGRAM</b> | <b>ASSIGNED TO</b> | <b>STATUS</b>                                                                                                                         |
|----------------------|--------------------------------------------------|-------------|------------------------|----------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 1/21/14              | AG Processing, Inc.                              |             | Permit Conditions      | AQ             | Preziosi           | Negotiations continuing. Last communication with appellant on 5/20/14. Communication from appellant 7/22/14. Internal meeting 9/5/14. |
| 4/17/14              | REIC/Iowa Co. Sanitary Landfill                  | 6           | Permit Conditions      | WW             | Tack               | REIC meeting with WES on 6/17/14. Facility plan submitted 8/29/14. Antidegradation analysis needed next.                              |
| 8/29/14              | Altoona, City of                                 | 5           | Permit Conditions      | WW             | Schoenebaum        | Negotiating before filing.                                                                                                            |
| 9/08/14              | Craig Ver Steegh                                 | 5           | Permit Conditions      | WW             | Tack               | Response from Appellant due December 1, 2014.                                                                                         |
| 10/01/14             | Amsted Rail Company, Inc.<br>(Griffin Wheel Co.) |             | Permit Conditions      | SW             | Tack               | Negotiating before filing.                                                                                                            |
| 11/13/14             | Adam Timmerman                                   | 3           | Order/Penalty          | AFO            | Book               | Negotiating before filing.                                                                                                            |

**DATE:** January, 2015

**TO:** EPC

**FROM:** Ed Tormey

**RE:** Enforcement Report Update

The following new enforcement actions were taken during this reporting period:

| Name, Location and Field Office Number               | Program                                  | Alleged Violation                                                                                                               | Action                                                               | Date     |
|------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------|
| Brian Peterson<br>Woodbury Co. (3)                   | Animal Feeding Operation                 | Prohibited Discharge – Open Feedlot; WQ Violations – General Criteria                                                           | Order/Penalty<br>\$10,000                                            | 12/01/14 |
| West Central Cooperative<br>Halbur (4)               | Wastewater                               | Prohibited Discharge; WQ Violations – General Criteria                                                                          | Consent Order<br>\$4,000<br>\$4,550/Fish<br>\$2,513.88/Inves.        | 12/01/14 |
| Joel Thys; Thys Chevrolet, Inc.<br>Benton Co. (1)    | Air Quality<br>Solid Waste               | Open Burning; Asbestos; Illegal Disposal                                                                                        | Order/Penalty<br>\$10,000                                            | 12/01/14 |
| Benjamin J. Waigand<br>Union Co. (4)                 | Animal Feeding Operation                 | Land Application Separation Distance; Uncertified Applicator                                                                    | Consent Order<br>\$5,000                                             | 12/04/14 |
| Minsa Corporation<br>Red Oak (4)                     | Wastewater                               | Monitoring/Reporting; Discharge Limits                                                                                          | Consent Order<br>\$10,000                                            | 12/19/14 |
| Galen Wagner<br>Mitchell Co. (2)                     | Animal Feeding Operation;<br>Solid Waste | Prohibited Discharge – Open Feedlot; Failure to Report a Release; Water Quality Violations – General Criteria; Illegal Disposal | Consent Order<br>\$6,500                                             | 12/23/14 |
| Agriland FS, Inc.<br>Guthrie Co. (4)                 | Wastewater                               | Prohibited Discharge; Water Quality Violations – General Criteria                                                               | Consent Order<br>\$4,000<br>\$3,086 Fish<br>\$2,376<br>Investigation | 12/22/14 |
| Mahle Engine Components<br>USA, Inc.<br>Atlantic (4) | Wastewater                               | Compliance Schedule; Discharge Limits                                                                                           | Order/Penalty<br>\$10,000                                            | 12/23/14 |
| Lee Grage<br>Plymouth Co. (3)                        | Animal Feeding Operation                 | Monitoring/Reporting                                                                                                            | Consent Order<br>\$3,000                                             | 12/31/14 |



IOWA DEPARTMENT OF NATURAL RESOURCES  
LEGAL SERVICES BUREAU

**DATE:** January 1, 2015  
**TO:** Environmental Protection Commission  
**FROM:** Ed Tormey  
**SUBJECT:** Summary of Administrative Penalties

The following administrative penalties are due:

| NAME/LOCATION                                             | PROGRAM   | AMOUNT | DUE DATE |
|-----------------------------------------------------------|-----------|--------|----------|
| Robert and Sally Shelley (Guthrie Center)                 | SW        | 1,000  | 3-04-91  |
| Daryl & Karen Hollingsworth d/b/a Medora Store(Indianola) | UT        | 3,825  | 3-15-96  |
| Greg Morton; Brenda Hornyak (Decatur Co.)                 | SW/AQ/WW  | 3,000  | 11-04-98 |
| James Harter (Fairfield)                                  | WW        | 1,336  | 8-01-01  |
| * Floyd Kroeze (Butler Co.)                               | AFO       | 1,500  | 2-20-01  |
| Midway Oil Co.; David Requet (Davenport)                  | UT        | 5,355  | 9-20-02  |
| Midway Oil Co.; David Requet; John Bliss                  | UT        | 44,900 | 2-28-03  |
| Green Valley Mobile Home Park (Mt. Pleasant)              | WW        | 5,000  | 4-23-03  |
| Midway Oil Company (West Branch)                          | UT        | 7,300  | 5-03-03  |
| Midway Oil Company (Davenport)                            | UT        | 5,790  | 5-03-03  |
| Albert Miller (Kalona)                                    | AQ/SW     | 9,760  | 9-26-03  |
| Mike Messerschmidt (Martinsburg)                          | AQ/SW     | 500    | 4-13-04  |
| Interchange Service Co., Inc., et.al. (Onawa)             | WW        | 6,000  | 5-07-04  |
| # Dunphy Poultry (Union Co.)                              | AFO       | 1,500  | 6-27-04  |
| # Cash Brewer (Cherokee Co.)                              | AFO/SW    | 10,000 | 8-25-04  |
| # Doorenbos Poultry; Scott Doorenbos (Sioux Co.)          | AFO       | 1,500  | 10-09-04 |
| # Doug Sweeney (O'Brien Co.)                              | AFO       | 375    | 12-21-04 |
| Harold Linnaberry (Clinton Co.)                           | SW        | 1,000  | 5-18-05  |
| # Joel McNeill (Kossuth Co.)                              | AFO       | 2,460  | 1 21-06  |
| Affordable Asbestos Removal, Inc. (Monticello)            | AQ        | 7,000  | 4-28-06  |
| # Troy VanBeek (Lyon Co.)                                 | AFO       | 3,500  | 10-16-06 |
| Larry Bergen (Worth Co.)                                  | AQ/SW     | 257    | 11-01-06 |
| # Joshua Van Der Weide (Lyon Co.)                         | AFO       | 3,500  | 2-25-08  |
| Jon Knabel (Clinton Co.)                                  | AQ/SW     | 2,000  | 12-16-08 |
| # Rick Renken (LeMars)                                    | AFO       | 996    | 7-03-09  |
| # Robert Fangmann (Dubuque Co.)                           | AFO       | 1,000  | 7-15-09  |
| # Brian Lill (Sioux Co.)                                  | AFO       | 2,865  | 7-18-09  |
| Denny Geer (New Market)                                   | SW        | 9,476  | 10-31-09 |
| Shrey Petroleum; Palean Oil; Profuel Three (Keokuk)       | UT        | 10,000 | 3-19-10  |
| Melvin Wellik; Wellik-DeWitt Implement (Britt)            | AQ/SW     | 2,900  | 4-08-10  |
| Alchemist USA, LLC; Ravinder Singh (Malcom)               | UT        | 8,260  | 5-03-10  |
| # LJ Unlimited, LLC (Franklin Co.)                        | AFO/AQ/SW | 3,500  | 5-27-10  |
| Bret Cassens; J & J Pit Stop (Columbus Junction)          | UT        | 8,700  | 6-20-10  |
| # Christopher P. Hardt (Kossuth Co.)                      | AFO       | 2,000  | 7-07-10  |
| AKD Investments, LLC; H.M. Mart, Inc. (Blue Grass)        | UT        | 6,900  | 8-06-10  |
| Eastern Hills Baptist Church (Council Bluffs)             | WS        | 1,250  | 11-29-10 |

#Animal Feeding Operation  
**BOLD Entries Have Been Referred to DRF**

|                                                          |              |                |          |
|----------------------------------------------------------|--------------|----------------|----------|
| # Joe McNeill (Kossuth Co.)                              | AFO          | 2,460          | 12-23-10 |
| Gonzalez & Sons Express, Inc. (DeSoto)                   | WW           | 8,000          | 4-20-11  |
| David C. Kuhlemeier (Cerro Gordo Co.)                    | AQ/SW        | 2,000          | 6-30-11  |
| Steve Friesth (Webster Co.)                              | AQ/SW        | 7,857          | 11-26-11 |
| Josh Oetken (Worth Co.)                                  | AQ/SW        | 8,370          | 3-11-12  |
| Jeffrey G. Gerritson (O'Brien Co.)                       | SW           | 2,000          | 4-16-12  |
| Bhupinder Gangahar/Saroj Gangahar/International Business | UT           | 7,935          | 4-20-12  |
| Finney Industrial Painting, Inc. (Fairfield)             | AQ/WW        | 2,275          | 4-23-12  |
| Terry Philips; TK Enterprises (Washington Co.)           | AQ/WW        | 3,000          | 5-30-12  |
| # Boerderij De Vedhoek, LLC (Butler Co.)                 | AFO          | 8,500          | 11-16-12 |
| Noah Coppess (Cedar Co.)                                 | AQ/SW        | 7,500          | 2-23-13  |
| Shane Rechkemmer (Fayette Co.)                           | SW           | 1,000          | 3-01-13  |
| B Petro Corporation (Cedar Rapids)                       | UT           | 7,728          | 5-13-13  |
| Ken Odom (Iowa Co.)                                      | AQ/SW        | 5,000          | 4-26-13  |
| Massey Properties, LLC; The Wharf (Dubuque)              | WS           | 10,000         | 10-05-13 |
| Robert Downing (Mahaska Co.)                             | AQ/SW        | 10,000         | 11-20-13 |
| Shriners Hospital for Children, Inc. (Des Moines)        | UT           | 8,890          | 12-03-13 |
| Larry Eisenhower (Woodbury Co.)                          | AQ/SW        | 4,675          | 3-01-14  |
| Randy Wise; Wise Construction (Buena Vista Co.)          | AQ/SW        | 3,000          | 4-10-14  |
| Advanced Electroforming, Inc. (Cedar Co.)                | AQ           | 1,500          | 4-03-14  |
| Audra Early; Mid-States Mfg. & Engr. (Van Buren Co.)     | AQ           | 2,500          | 4-03-14  |
| Western Iowa Telephone Assoc. (Lawton)                   | WW           | 4,000          | 5-24-14  |
| Wendall Abkes (Parkersburg)                              | SW           | 3,000          | 7-30-14  |
| # Treven Howard; Northwest Manure Mgmt. (Ocheyedan)      | AFO          | 6,000          | 10-09-14 |
| Donna J. Jensen (Ringsted)                               | AQ/SW        | 3,000          | 10-17-14 |
| # Charles and Patricia Henningsen (Ruthven)              | AFO          | 2,000          | 10-19-14 |
| Dennis Habben (Sioux Co.)                                | SW           | 10,000         | 11-01-14 |
| Leda Properties, LTD (Dubuque)                           | WW           | 5,000          | 12-12-14 |
| Annie's LLC; Togie Pub (Lime Springs)                    | WS           | 3,500          | 12-22-14 |
|                                                          | <b>TOTAL</b> | <b>336,895</b> |          |

**The following penalties have been assessed but are not due at this time:**

|                                              |              |               |         |
|----------------------------------------------|--------------|---------------|---------|
| Joel Thys; Thys Chevrolet, Inc. (Benton Co.) | AQ/SW        | 10,000        | -----   |
| West Central Cooperative (Halbur)            | WW           | 4,000         | -----   |
| Brian Peterson (Woodbury Co.)                | AFO          | 10,000        | -----   |
| # Benjamin J. Waigand (Union Co.)            | AFO          | 2,500         | 4-15-15 |
| # Galen Wagner (Mitchell Co.)                | AFO/SW       | 6,500         | 1-23-15 |
| # Lee Grage (Plymouth Co.)                   | AFO          | 3,000         | 1-30-15 |
| Mahle Engine Components USA, Inc. (Atlantic) | WW           | 10,000        | -----   |
|                                              | <b>TOTAL</b> | <b>46,000</b> |         |

**The following penalties have been placed on payment plans:**

|                                             |          |        |          |
|---------------------------------------------|----------|--------|----------|
| * Reginald Parcel (Henry Co.)               | AQ/SW    | 110    | 4-23-05  |
| * Country Stores of Carroll, Ltd. (Carroll) | UT       | 1,408  | 6-06-05  |
| * Douglas Bloomquist (Webster Co.)          | AQ/SW    | 3,500  | 12-01-07 |
| * Jack Knudson (Irwin)                      | UT       | 10,000 | 1-15-08  |
| # Jerry Passehl (Latimer)                   | SW/WW/HC | 2,695  | 7-01-09  |
| Jerry Wernimont (Carroll)                   | AQ/SW    | 1,500  | 4-19-10  |

#Animal Feeding Operation

**BOLD Entries Have Been Referred to DRF**

|                                                         |              |               |                 |
|---------------------------------------------------------|--------------|---------------|-----------------|
| # <b>Ernest Greiner (Keokuk Co.)</b>                    | <b>AFO</b>   | <b>500</b>    | <b>10-10-10</b> |
| Jim Scallon (Butler Co.)                                | SW           | 700           | 4-15-13         |
| R.H. Hummer Jr., Inc.; 2161 Highway 6 Trail (Iowa Co.)  | AQ/SW        | 3,643         | 9-15-13         |
| Patrick Baker; Stockton Auto (Davenport)                | AQ/SW        | 166           | 12-15-14        |
| Air Advantage, Inc. (Mt. Pleasant)                      | WW           | 1,500         | 4-01-15         |
| Ellsworth Excavating Co. (Muscatine Co.)                | AQ/SW        | 450           | 1-01-15         |
| # Steve Grettenberg; Dragster LLC                       | AFO          | 1,750         | 11-20-14        |
| <b>Millard Elston III; The Earthman (Jefferson Co.)</b> | <b>AQ/SW</b> | <b>1,815</b>  | <b>2-15-13</b>  |
| Simon Simonson (Kossuth Co.)                            | SW           | 4,200         | 11-30-14        |
| ADA Enterprises, Inc. (Worth Co.)                       | WW           | 5,000         | 8-15-14         |
| Niehouse Cleaners & Draperies, Inc. (Marshalltown)      | AQ           | 2,500         | 9-15-14         |
| # David Dahlgren (Clarion)                              | AFO          | 2,250         | 12-15-14        |
|                                                         | <b>TOTAL</b> | <b>44,595</b> |                 |

**The following administrative penalties have been appealed:**

|                                                                |              |               |  |
|----------------------------------------------------------------|--------------|---------------|--|
| <b>Harlan Rudd; Karen Rudd; Rudd Bros. Tires (Drakesville)</b> | <b>UT</b>    | <b>10,000</b> |  |
| <b>Bondurant, City of</b>                                      | <b>WW</b>    | <b>10,000</b> |  |
| Helen and Virgil Homer; Grandmas Snack Shop; (Aredale)         | WS           | 8,461         |  |
| <b>Manson, City of</b>                                         | <b>WS</b>    | <b>10,000</b> |  |
| <b>Anderson Excavating Company, Inc. (Pottawattamie Co.)</b>   | <b>SW</b>    | <b>10,000</b> |  |
| # Adam Timmerman; AT Livestock Ent. South (Cherokee Co.)       | AFO          | 4,250         |  |
|                                                                | <b>TOTAL</b> | <b>52,711</b> |  |

**The following administrative penalties have been collected:**

|                                                     |              |               |  |
|-----------------------------------------------------|--------------|---------------|--|
| Ainsworth Four Corners, LLC (Ainsworth)             | WW           | 10,000        |  |
| # Benjamin J. Waigand (Union Co.)                   | AFO          | 2,500         |  |
| Patrick Baker; Stockton Auto (Davenport)            | AQ/SW        | 83            |  |
| Ellsworth Excavating Co. (Muscatine Co.)            | AQ/SW        | 75            |  |
| Ellsworth Excavating Co. (Muscatine Co.)            | AQ/SW        | 75            |  |
| Simon Simonson (Kossuth Co.)                        | SW           | 100           |  |
| Wellman Dynamics Corp. (Creston) Stipulated Penalty | SW           | 2,000         |  |
| Minsa Corporation (Red Oak)                         | WW           | 10,000        |  |
| Agriland FS, Inc. (Guthrie Co.)                     | WW           | 4,000         |  |
| Higman Sand and Gravel, Inc. (Plymouth Co.)         | FP           | 10,000        |  |
| Patrick Baker; Stockton Auto (Davenport)            | AQ/SW        | 83            |  |
| # Steve Grettenberg; Dragster LLC                   | AFO          | 750           |  |
| Ellsworth Excavating Co. (Muscatine Co.)            | AQ/SW        | 75            |  |
|                                                     | <b>TOTAL</b> | <b>39,741</b> |  |

#Animal Feeding Operation

**BOLD Entries Have Been Referred to DRF**

# Air Quality Bureau Stakeholder Report

November

# 2014

**Strategic Priorities for  
Financial Sustainability**

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## Executive Summary

### A. Review of Air Quality Program Activities

The Bureau protects air quality and the health and well-being of Iowa's citizens by providing a wide variety of services.

Within the next 7 years, the Bureau anticipates providing new or additional services in the areas of:

- NAAQS – Implementation of revised ozone standard pending EPA proposal
- NAAQS – Implementation of the new one-hour standard for sulfur dioxide
- Carbon pollution standards for new power plants
- Carbon pollution standards for existing power plants (Section 111d of the Clean Air Act)

### B. Air Quality Program Funding: Current Approach and Outlook

The Bureau receives funding from 3 sources: Title V emission fees, federal grants and State funds including the General Fund and Environment First funds.

Title V fees must, by law, pay for the cost of the Title V operating permit program.

Federal grants can only supplement, not replace, nonfederal funds for air pollution control. They cannot fund Title V permit program activities or be used to provide nonfederal matching funds.

The future outlook of department revenue appears unfavorable. Revenue derived from Title V fees has declined 22% since it peaked in FY 2010. Federal grants may remain stable, but purchasing power has declined by nearly 16% between FY 2000 and FY 2014. Contributions from the State General Fund have declined 45% between FY 2005 and 2014.

In fiscal year 2015, a budget shortfall was funded through a one-time appropriation from the household hazardous waste account of the groundwater protection fund.

Under current conditions, the projected revenue shortfall will be approximately \$6 million annually by 2019.

### C. Review of Current and Anticipated Bureau Expenses

The top 5 categories of program expenses are: Title V operating permits (29%), major source construction permitting (17%), ambient monitoring of population centers (17%), PSD permits (12%), and minor source construction permitting (8%).

The Title V permit program requires additional staff to provide timely service. The system currently has a backlog of more than 30 permit applications. New Title V applications may sit for up to 5 months before processing begins because permit writers are not available to work on the project. Without additional resources, the backlog is projected to continue indefinitely.

Approximately 18% of Bureau customers providing comments through online surveys list permit process delays as their main concern or area for Bureau improvement.

By FY 2019 the Bureau anticipates a shortfall of nearly \$6.0 million per year just to maintain current services, not including the additional projected expenses discussed in this report.

Between 2016 and 2024, the Bureau anticipates needing additional revenue ranging between \$2.5 and \$7 million per year if existing programs remain in place and all new programs are fully implemented at the highest cost option. New program costs are expected in the program areas listed above, and to maintain the State Permitting and Air Reporting System (SPARS).

The present funding strategy is not adequate to meet near or long-term program needs or the needs of the regulated facilities.

## Executive Summary

### D. Process Improvements and Cost Reduction

The Bureau has initiated several process improvements and identified a number of actions reduce cost, and improve efficiency and response times. The bulk of the savings have been realized in three areas: Title V permit administration, construction permit issuance and support services.

Cost reduction efforts have included staff and contract reductions, and cost categories for fleet management, IT equipment, and office expenses.

### E. Fee Structure Benchmarking

The Bureau conducted fee structure benchmarking against thirteen states and within the Iowa DNR. All of the benchmarked states charged for service. Survey results indicate that states commonly charged registration fees (85%) or an "annual fee" for operating in the state (88%).

The National Association of Clean Air Agencies (NACAA) studied state air programs (2009) from 30 states, and found "state and local air agencies provide 77 percent of their budgets (not including permit fees under the federal Title V program), while federal grants constitute only 23 percent." Studies indicate that the relative contribution of funding made by the State of Iowa to the Bureau is on the low side compared to other states.

Benchmarking against Bureaus within DNR also indicated a lack of alignment in the configuration of the budgets. The Field Services, Land Quality and Water Quality Bureaus received between \$1.1 and \$2.1 million more funding in FY 2015 from the Environment First & Infrastructure Funds, and received between \$2.8 and \$6.8 million more from federal grants. The Bureau relied on fees as a primary source of revenue, collecting more than \$8.4 million in fees (66% of budget), compared to the Land Quality Bureau that collected \$863,000 (6% of budget) and Water Quality that collected \$7.3 million (39% of budget).

Dependence on emission fees has the potential to create inequity because the impact of the fees is concentrated, while the impact of fees charged by the other Bureaus is diluted by the size of their customer base. Statistics from the FY 2012 budget indicate the Bureau derived its income from less than 300 sources, each paying a single annual fee, compared to the Land Quality Bureau that generated its fee from more than 9,500 transactions and the Water Quality Bureau that obtained its revenue from more than 21,000 transactions. The Land and Water Quality Bureaus charge a wide variety of fees, while the Air Quality Bureau only charges for emissions.

It appears that any successful strategy for financial sustainability will require new fees and a larger contribution from the State. Stakeholders agreed that certain general principles should be followed when devising fee structures. These are listed on the last page of the Executive Summary.

### F. Moving Toward Financial Sustainability

Amid increasing federal regulation and concern for public health, costs are expected to rise and revenue shortfalls will remain a common theme until the funding structure is diversified and the Bureau becomes financially sustainable.

The strategy recommended in this report to achieve financial sustainability has four pillars. They are to: 1) identify and control costs, 2) diversify the income structure, 3) ensure sources of sufficient and sustainable public funding, and 4) adjust budgeting practices.

## Executive Summary

### F . Moving Toward Financial Sustainability (continued)

The Bureau cannot raise the current Title V emissions fee to solve the problem of Bureau funding. First, Title V emission fees are only paid by Title V permit holders, and the revenues can only support the Title V operating permit program. Federal law states that "(a)ny fee required to be collected ... under this subsection shall be utilized solely to cover all reasonable (direct and indirect) costs required to support the permit program." Second, revenue is decreasing due to reductions in emissions, and reliance on a diminishing fee base creates significant risk to financial stability. The state needs additional revenue sources to move the Bureau toward a sustainable funding mechanism.

Increasing the State's contribution to the budget of the Air Quality Bureau can be justified in a number of ways:

- The citizens of the State are the primary beneficiaries of many services provided by the Bureau. This includes complaint response, ambient air monitoring, asbestos inspections, and small business assistance. The annual cost of operations and programs required for the state as a whole has significantly exceeded the annual state contribution.
- Statistics in the 2011 National Emissions Inventory indicate that major sources in Iowa are responsible for 11% of total emissions to ambient air in the State but routinely pay for 75% of the Bureau's total program costs.
- Benchmarking indicates the need for better alignment:
  - ⇒ Historical data indicates the total size of the Air Quality budget tends to be in the bottom third compared to other states.
  - ⇒ The size of the State contribution is low compared to other states. An NACAA study in 2009 surveyed 35 states and found "state and local air agencies provide 77 percent of their budgets (not including permit fees under the federal Title V program), while federal grants constitute only 23 percent." In Iowa, the contribution from the General Fund is 6-8% annually. The cumulative disbursement from the General Fund, Environment First Fund and Groundwater Fund together was less than 10% of budget in FY 15.
  - ⇒ Within the DNR, the Field Services, Land Quality and Water Quality Bureaus in FY 2015 received 10-15% more funding (\$1 – 2 million) from the Environment First & Infrastructure Fund.
- Capturing all increases in costs through fees will be burdensome to businesses in the state, making Iowa less competitive in attracting and keeping jobs.
- Businesses that pay fees also pay taxes and in other ways contribute funding to the General Fund.

## Recommendations

1. *The Air Quality Bureau should have a fully developed, sustainable funding mechanism in place by the end of fiscal year 2019. Implementation of this recommendation would require increasing the Bureau budget from the current \$12.8 million to roughly \$14.0 million, not including expenditures for three new EPA requirements discussed in this report (Sulfur dioxide [SO<sub>2</sub>]and Ozone National Ambient Air Quality Standards [NAAQS], and the State Permitting and Air Reporting System [SPARS]).*
2. *The Bureau should continue tracking costs and encourage initiatives to provide services efficiently and seamlessly. Projects with highly variable costs (SO<sub>2</sub> and Ozone NAAQS, SPARS) should be authorized when program requirements and needs become clearer. Funding should be provided either from the General Fund, or by special appropriation as a one-time program expense (as is done for the Water Quality Bureau), since these programs are required by law for the benefit and protection of Iowa's citizens.*
3. *The Bureau should charge fees for service. The Asbestos NESHAP should charge a notification fee. The cost of application review, permit issuance and associated modeling related to air construction permitting for major and minor sources should also incur a fee for service. The Stakeholders group also recommends the Bureau charge fees to cover the cost of application review and permit issuance for Title V operating permits. Title V emissions fees should continue and be administered as they are today. The fee schedule for the major / PSD / Title V sources would be established by a group of major source stakeholders. Fees for minor source permit issuance and modeling costs would be determined by a minor source stakeholder group, and paid proportionally, with a target of 40% of cost paid by the sources and 60% of cost paid by the state. Both stakeholder groups would meet annually to evaluate their fee structures as is currently done for the Title V emission fee. Redistribution of costs in this way would create a sustainable revenue stream for the Title V program which will offset the projected decreases in chargeable emissions. Implementation of fee structures would collect roughly \$2.6 million annually from major / PSD / Title V sources, roughly \$250,000 annually from minor sources, and asbestos fees of \$300,000 to \$400,000.*
4. *State funding from the General Fund should be increased for programs whose primary beneficiaries are citizens of the state. Redistribution of costs in this way would require increasing the state contribution to the budget from \$2.5 million contributed in FY 2015 to roughly \$3.2 million in subsequent years, not including cost items related to new EPA requirements related to SO<sub>2</sub> and Ozone NAAQS, and SPARS.*
5. *A dedicated fund should be created for deposits related to new user fees. Proposed wording is provided in Appendix ii. Monies deposited into the new fund should be retained for the purposes of administering associated programs, and allowed to accrue to fund future programs.*
6. *Certain cost lines within the Bureau of Air Quality budget should be reassigned to funding sources that are more equitable and appropriate.*

## Principles for Decision-Making

Stakeholders agreed that regardless of the funding strategy adopted, decisions regarding user fees should follow certain general principles:

1. The Bureau should have a funding structure that provides a sustainable future as regulations change.
2. Funding solutions should be fair to stakeholders, transparent and easily understood.
3. Fees levied by the Bureau should be deposited into a dedicated fund. Unspent funds should carry forward into the next fiscal year to provide resources for future requirements.
4. In cases where the cost of a service is directly traceable to users or beneficiaries of air quality services, those users or beneficiaries should pay part of the cost.
5. The Title V permit program should continue to be self-sustaining through the payment of fees by Title V permit holders. The process for setting the amount of the annual Title V emissions tonnage fee should continue to include budgetary review and consultation with stakeholders.
6. The cost of programs and services provided by the Bureau for the benefit of Iowans as a whole should be paid by the state. This will require increased support from the state. This may include costs associated with:
  - Source oriented monitors
  - Ambient Monitoring – PSD Background & Transport
  - Field inspections for minor sources
  - Compliance assistance and enforcement for minor sources
  - Legal Services for minor sources
  - Management, secretarial & data support for minor source programs
  - Ambient monitoring for population areas
7. Costs for Core Programs and services benefiting both individual sources and the general public should be supported by revenue from the Title V program and state funding. This will require increased support from the state. This includes costs outlined in the “Core Programs” associated with:
  - Emissions Inventory Questionnaire
  - Rules, Budget Contracts
  - AQB/UNI/Small Business Assistance
  - State Implementation Program activities
  - Legal service activities
  - Management, Secretarial & Data Support
8. New funding sources should be investigated and pursued where possible. This includes potential revenue derived from mobile sources and tire recycling.
9. The Bureau should continue its efforts to remove permit backlogs, increase process efficiency and improve the customer experience.
10. Permit processes should accommodate requests for “expedited” application processing for an additional fee.

## Introduction

### 1. Purpose of the Project

The Director of the Iowa Department of Natural Resources (DNR) assembled this Stakeholder group to study the Air Quality Bureau (Bureau), its programming and current funding mechanisms, and recommend a funding strategy that would allow it to fulfill its mission now and in the future. Thirty (30) participants were selected by the Director to represent the following stakeholder groups: small and large businesses, associations, local governments, non-governmental organizations and the general public. The group met six times over the course of five months, assisted by a facilitator<sup>1</sup> and Bureau staff. Representatives of the Bureau attended all the meetings to provide information and answered questions. During these meetings, the Stakeholder group received and reviewed information provided by the Bureau on the following topics:

- Need for the study
- Services and programs offered by the Bureau
- Budget overview and current sources of funding
- Initiatives completed to reduce costs and improve efficiency within the Bureau
- Additional funding needs
- Effect of funding shortages on the Bureau’s ability to deliver service
- Benchmarking the Bureau against programs internal to DNR, and externally against other state air quality programs
- Tools that could be used to calculate the results of various alternate funding scenarios

As the Stakeholders reviewed this information, they were asked to consider:

- The revenue that would be needed to support the direct and indirect costs of implementing the state air quality statutes and federal CAA programs in Iowa,
- Efficiencies that might streamline processes and reduce expenses while meeting program needs,
- Alternative funding mechanisms that might work better,
- Economic impacts to consumers, businesses and taxpayers if alternative funding mechanisms were adopted, and
- Appropriate funding strategies that would be technically feasible, politically acceptable and advance the common good.

<sup>1</sup> The facilitator, retained for this project by the Director, was Darrell Hanson. Mr. Hanson is the former Chair of the Environmental Protection Commission and member of the Iowa Utilities Board.

## 2. Background

In 1996 the State of Iowa was delegated the federally mandated air quality Title V Operating Permit program, and has collected fees from Title V permit holders as required by the Clean Air Act (CAA). These fees, collected annually, have supported about 75% of the Air Quality Bureau activities. This funding supports all of the Title V program cost and provides compliance assistance support to non-Title V facilities as required by Section 507 of the CAA. The remainder of Bureau activities, associated with minor sources and core programs, are funded equally by federal grants matched with state funds. The Bureau's programmatic budget in FY 2015 was \$12.8 million.

Title V permit holders are typically large businesses, and there are about 300 of them in the state. The Title V fees are calculated by multiplying the actual emissions reported by each source by a fee rate established by the Environmental Protection Commission (EPC). Over the years, existing air regulations have become more restrictive, new regulations have been issued by EPA, businesses have moved toward "green" processes and pollution control equipment has been added by Title V permit holders. These factors combine to cause declining emissions and Title V fees have declined with them. Emissions subject to Title V fees peaked at over 242,000 tons in 2005 and declined by 37% through 2013. They are expected to level off at less than 60% of 2005 levels by 2016.

The Title V fee rate can vary, but is capped in the Iowa Administrative Code at \$56 per ton unless changed through formal rulemaking. The maximum rate of \$56 has been used in each of the last 4 years to attempt to meet Bureau budget needs, but has not been sufficient despite a 12% reduction in staffing. In fiscal year 2015, the Bureau's ongoing combined revenue (Title V fees, federal grants and General Funds) was not adequate to meet budgeted expenses and a shortfall was projected. This shortfall was partially addressed with a one-time special appropriation of \$1.4 million. The projected revenue generated by the Title V program will continue to decline steadily over the next several years while federal grant funds also remain flat or decrease, resulting in the Bureau projecting a budget shortfall of \$6 million by 2019.

## 3. Participants

The following organizations participated in this process. Signature endorsements are provided in Appendix i:

|                                           |                                                  |
|-------------------------------------------|--------------------------------------------------|
| ADM Corn Processing                       | Iowa Environmental Council                       |
| Ag Processing, Inc.                       | Iowa Environmental Health Association            |
| ALCOA Inc.                                | Iowa Institute for Cooperatives                  |
| Asphalt Paving Association of Iowa        | Iowa Limestone Producers Association             |
| Cargill                                   | Iowa Renewable Fuels Association                 |
| Central Iowa Power Cooperative            | Iowa State University                            |
| CF Industries                             | Linn County Public Health                        |
| Climax Molybdenum Company                 | Manatts, Inc.                                    |
| Deere & Company                           | MidAmerican Energy Company                       |
| Environmental Management Services of Iowa | National Federation of Independent Businesses    |
| Grain Processing Corporation              | Oldcastle Materials Group                        |
| Interstate Power and Light Co.            | Petroleum Marketers & Convenience Stores of Iowa |
| Iowa Association of Business and Industry | Poet Biorefining - Coon Rapids                   |
| Iowa Association of Electric Cooperatives | Polk County Public Works                         |
| Iowa Association of Municipal Utilities   | Sac and Fox Tribe of the Mississippi in Iowa     |

## 4. Other Notes

This report reviews key information provided by the Bureau to the Stakeholder Group and presents findings, conclusions and recommendations for the restructuring of the Bureau's budget. Tables and graphs provided throughout were prepared by the Bureau.

The positions taken in this report are supported by technical information provided by the Bureau, and the Stakeholders relied on the accuracy of the information presented. They spent no time confirming or recalculating numerical data.

## A. Review of Air Quality Program Activities

### 1. Overview

The primary mission of the Iowa Department of Natural Resources' Air Quality Bureau (the Bureau) is to maintain Iowa's air quality. With cleaner air, people are healthier and Iowa's wildlife and plant life thrive. Achieving this goal requires both local and regional efforts. The DNR leads Iowans in caring for the state's air quality by partnering with communities, business and industry, organizations and private citizens. The Bureau provides the knowledge and tools necessary to create workable solutions to air quality issues.

### 2. Primary Services

The Bureau administers various programs and provides a number of services in pursuit of its mission. This list provides a high-level summary of those programs and services:

- **National Emission Standards for Hazardous Air Pollutants (NESHAP):** The U.S. Environmental Protection Agency (EPA) and the Iowa Department of Natural Resources (DNR) are required by law to reduce exposure to hazardous air pollutants (HAPs). EPA has issued over 120 National Emission Standards for Hazardous Air Pollutants (NESHAP). Approximately 50 of those NESHAP affect facilities in Iowa, and DNR has developed implementation tools for these requirements.
- **Asbestos:** Building renovations, demolitions and training fires are potentially subject to asbestos release prevention efforts. The Bureau receives notifications of regulated activity, provides inspection services, assists with proper removal and disposal, and issues asbestos contractor permits.
- **Construction Permits:** Any piece of equipment or control equipment that emits any regulated pollutant constructed, modified, reconstructed, or altered after September 23, 1970, is required to obtain a construction permit unless it is exempt from permitting requirements. The Bureau provides intake services for these applications, reviews them for regulatory adequacy and issues construction permits.
- **Emissions inventory:** The DNR Emissions Inventory Unit is responsible for reviewing and estimating air pollution data from a variety of sources throughout the state. This includes point, mobile, biogenic and non-point sources. The emissions inventory unit provides technical assistance, including selection of emission factors, calculations, and computer modelling to organizations completing emissions inventories.
- **Annual greenhouse gas inventories** are required by Iowa Code 455B.104 which states that "by December 31, of each year, the department shall submit a report to the governor and the general assembly regarding the greenhouse gas (GHG) emissions in the state during the previous calendar year and forecasting trends in such emissions...." The 2012 GHG Inventory is a "top-down" inventory based on statewide activity data from agriculture,

fossil fuel combustion, industrial processes, natural gas transmission and distribution, transportation, solid waste, and wastewater treatment. It also documents sequestered or emitted carbon from land use, land use change, and forestry (LULUCF).

- The Clean Air Act requires the state to prepare **State Implementation Plans (SIPs)** and submit designation recommendations whenever EPA changes national ambient air quality standards. The Bureau also develops a State Implementation Plan (SIP) to help maintain and improve visibility at nearby federally mandated Class 1 areas.
- **Air dispersion modeling** is primarily associated with the construction permit application process, and is used to predict the air quality impact of new or modified emission sources. The modeling staff conducts and reviews modeling for minor and major sources. Other uses of dispersion modeling include: analysis of monitored violations of the National Ambient Air Quality Standards (NAAQS) and evaluation of impacts on Iowa and adjacent states caused by emissions crossing state lines.
- The **Ambient Air Monitoring** group organizes and plans air monitoring activities within the State. Federal monitoring requirements are set by EPA. DNR contracts with the State Hygienic Laboratory at the University of Iowa (SHL), along with the Polk and Linn County Local Programs, to collect air monitoring data, quality assure the results, and report the data to the public. Group members administer contracts, perform data analysis and assist in monitor siting.
- The **Operating Permits** section issues permits to operate facilities pursuant to Title V of the Federal Clean Air Act. Operating permits are designed to protect ambient air quality by ensuring equipment continues to perform as designed. Iowa's Operating Permit Program includes two types of operating permits: Title V and Small Source.
- The **SPARS (State Permitting and Air Reporting System)** is a web-based program designed to allow citizens, industry and the public access to a wide array of air pollution control information. The Bureau coordinates this program to help maintain data quality and system integrity.
- The **Field Services and Compliance Bureau** operates six field offices. They are the local representatives of the DNR's Environmental Services Division, and their primary task is helping industry and the public understand environmental services programs. They conduct routine inspections of all facilities, respond to spills and handle complaints from the public.

### 3. Future Services

The EPA creates and revises programs designed to protect environmental quality in the United States. These program revisions sometimes require action by the Bureau. Within the next 7 years, the Bureau anticipates providing new or additional services in the areas of:

- NAAQS – Implementation of revised ozone standard pending EPA proposal
- NAAQS – Implementation of the new one-hour standard for sulfur dioxide
- Carbon pollution standards for **new power plants**
- Carbon pollution standards for **existing power plants** (Section 111d of the Clean Air Act)

This topic is discussed in further detail in Section C of this report.

### 4. Bureau Performance Analysis

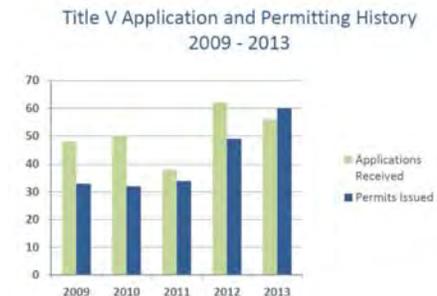
The Bureau tracks and maintains data regarding the performance levels of various sections. This data is used to evaluate program and individual performance, and recommend changes in process to improve efficiency and reduce cost.

The **construction permit section** tracks permit actions and response time for standard projects, plus those associated with New Source Review (NSR), Prevention of Significant Deterioration (PSD), and non-attainment areas:

|                                             | 5-yr Average<br>(2009 – 2013) | 2014<br>(as of 7/31/14) |
|---------------------------------------------|-------------------------------|-------------------------|
| Standard Projects                           | 503                           | 213                     |
| Standard Permit Actions                     | 1543                          | 815                     |
| Standard Project Average Leadtime           | 61 days                       | 84 days                 |
| PSD/NA NSR Complex Projects                 | 20                            | 6                       |
| PSD/NA NSR Complex Permit Actions           | 116                           | 66                      |
| PSD/NA NSR Complex Project Average Leadtime | 204 days                      | 180 days                |
| Other Complex Projects                      | 35                            | 10                      |
| Other Complex Permit Actions                | 253                           | 370                     |
| Other Complex Project Average Leadtime      | 235 days                      | 267 days                |

An analysis of rates of issuance and the backlog caused by staff shortages are presented in Section C of this report.

The **Title V permit program** tracks application intake and issuance rates.



The group completing **air pollution dispersion modeling** provided modeling for 110 projects, standard and complex, out of the 648 projects that were permitted during that period. This represents 17% of the permitted projects.

Modeling Project Statistics  
January 1, 2013 – July 1, 2014

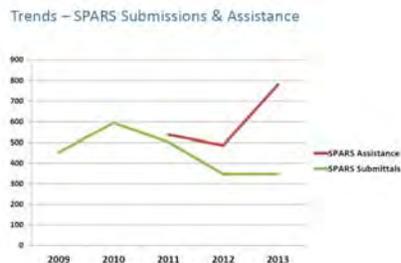
|                                                | Number of Projects Modeled | Number of Projects Permitted | Percent Projects Modeled |
|------------------------------------------------|----------------------------|------------------------------|--------------------------|
| Standard Construction Permit Projects          | 87                         | 588                          | 14.8                     |
| Complex Construction Permit Projects (Non-PSD) | 12                         | 36                           | 33.3                     |
| Complex Construction Permit Projects (PSD)     | 11                         | 24                           | 45.8                     |
| <b>Total</b>                                   | <b>110</b>                 | <b>648</b>                   | <b>17.0</b>              |

The Section supporting **emissions inventories** offers the following performance data:

#### Technical Services

|                                     |                                                                                                                                                                                                   |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Emissions Estimate Tools</b>     | <ul style="list-style-type: none"> <li>• 15 Spreadsheet Calculators</li> <li>• 16 Examples Calculations</li> <li>• Reference Materials</li> <li>• 10 Video Tutorials ("How To" Guides)</li> </ul> |
| <b>Webinar Training (2011-2014)</b> | • 689 participants                                                                                                                                                                                |
| <b>Streamlined Reporting</b>        | <ul style="list-style-type: none"> <li>• Reporting burden reduced 57%</li> <li>• New reporting form</li> </ul>                                                                                    |
| <b>Corrections to EPA Data</b>      | • 197,000 tons                                                                                                                                                                                    |

The Support Unit operating the **SPARS system** tracks use rates and requests for technical assistance:



The group completing **air monitoring** has data available for performance through 2013:

### Stack Tests and Reports for 2013

| Activity                        | Number |
|---------------------------------|--------|
| Stack Test Reports              | 221*   |
| On-site stack test observations | 126    |
| RATAs Conducted (# of units)    | 108    |
| Quarterly CEMS/COMS Reports     | 272    |

\*Totals include stack tests required by Title V Permits, Construction Permits, NSPS, and NESHAP

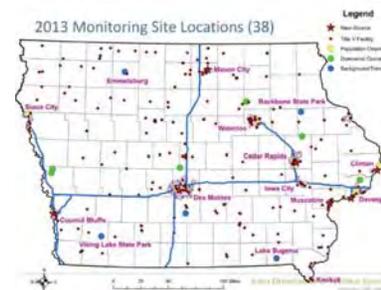
Additional actions taken by the Bureau to provide **alternative compliance options** are listed below:

### Implementation of alternative compliance options in 2013 (567 IAC Chapter 17 Compliance Procedures)

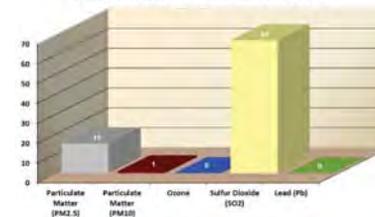
| Activity                                                                                                                                                                                 | Number |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Calls with facilities to discuss compliance issues/questions                                                                                                                             | >1800  |
| Letter of Non-compliance (LNC)                                                                                                                                                           | 141    |
| Notice of Violation (NOV)                                                                                                                                                                | 88     |
| Referrals to DNR Legal (11 for late emissions inventory reporting, 1 for ongoing emission limit violations, and 1 for construction and operation without obtaining construction permits) | 13     |

The **Compliance and Ambient Air Monitoring Section** is responsible for monitoring Iowa's air quality, establishing air quality background concentrations to expedite permitting, measuring compliance concentrations, documenting exceedances, and characterizing interstate transport of pollutants.

The current monitoring network consists of thirty eight (38) monitoring stations. They are located near source and Title V facilities and may be positioned for measuring downwind and background or transport concentrations or may be population oriented.



### Iowa NAAQS Exceedances, 2013



Below is an example of the real-time hourly Air Quality Index that is available to the public through the Air Quality Index website.

### Air Quality Index (July 14, 2014)



The **Field Offices** conducted the following inspections and investigations between July 1, 2012 and ending June 30, 2013:

- 13 Major, Title V Inspections
- 27 NESHAP Inspections
- 45 TV Voluntary SM Inspections
- 178 Minor Source Inspections
- 1095 Other Inspections, Including Fugitive dust
- 184 Open Burning Investigations
- 133 Notices of Violation (NOV)

**Additional Special Programs**

The Bureau occasionally undertakes special projects to provide compliance assistance to specific sources subject to new or complex requirements.

1. EPA and the DNR recently finalized regulations for reciprocating internal combustion engines (**RICE**). The permitting Section assisted facilities in understanding RICE requirements, met with individual facilities to address specific implementation concerns and provided RICE implementation tools, guidance, and reporting forms. Because of these efforts, there was a smooth transition of RICE responsibilities from EPA to DNR including an amnesty program to help facilities “catch up”. This table summarizes the result of this effort:

**Construction Permit Amnesty for Engines**

○ October 23, 2013 – April 23, 2014  
 ○ Allowed facilities to “catch up” on permitting requirements without enforcement action

| Resolution                        | Number of facilities | Number of Engines |
|-----------------------------------|----------------------|-------------------|
| Obtain Construction Permit        | 44                   | 53                |
| Submit Small Engine Registration  | 60                   | 64                |
| Submit Exemption “g” Notification | 6                    | 10                |
| <b>Totals</b>                     | <b>110</b>           | <b>127</b>        |

2. The Section also undertook a compliance assistance project for the dry cleaner industry subject to **NESHAP Subpart M**. The Bureau provided tools to help achieve and maintain compliance related to control equipment, leak inspections, system repair, record-keeping and reporting. Forty three outreach visits were made at 43 dry cleaning facilities. Thirty facilities received specific compliance assistance.

3. The Planning Unit oversees **local air quality programs** administered by Linn and Polk counties, which were established and operate in accordance with Iowa code, sections 445B.144 and 445B.145. The agreements with Linn and Polk County provide that both counties will process Title V operating permit applications and issue minor source construction permits and will perform modeling of minor sources. Linn County also process PSD permit applications and performs the modeling associated with them. Both local programs complete compliance and enforcement activities including facility inspections, stack test observations, air monitoring and complaint investigation. The activities of the local programs are subject to the review and evaluation of the Department pursuant to Iowa code section 455B.134. On-site reviews are conducted by the Bureau every 2 years for each program (Linn County – odd years and Polk County – even years).

## B. Air Quality Program Funding - Current Approach & Outlook

### 1. Current Funding Mechanisms

Based on the Department's presentations, the Bureau receives funding from several sources:

- a. Iowa companies pay fees for emission of air pollutants as required by Title V of the Clean Air Act (42 U.S. Code Sec. 7661(b)). On average these fees have provided funding for about 75% of the Bureau's operations.
- b. EPA provides the Bureau with federal grants under Sections 103 and 105 of the Clean Air Act (40 CFR 35.140).
- c. The Iowa General Assembly funds the Bureau through the General Fund, Infrastructure, and Environment First funds to provide the matching funds required by the Section 105 federal grants.

These funding mechanisms influence each other, and must be administered according to the rules and limitations contained in the Clean Air Act (CAA). For example, Section 105 of the CAA authorizes EPA to award grants to state and local agencies to develop plans and implement programs to prevent and control air pollution or to address national air quality standards. Section 105 funds require a 40-percent match by the state or local agency, and can only supplement - not replace - nonfederal funds for air pollution control. Federal grant funds cannot be used to fund Title V permit program activities, and they cannot be used to provide matching funds.

On August 4, 1993, operating permit fee guidance was issued by the Office of Air Quality Planning and Standards. About a year later, the EPA issued a memo "*Transition to Funding Portions of State and Local Air Programs with Permit Fees Rather Than Federal Grants*", which was accompanied by a matrix. The matrix listed those program activities outlined in the Title V fee guidance which are necessary for the development and implementation of a Title V operating permit program and which EPA expects to be covered by Title V fees. Categories of Title V related activity include:

- Development of the Title V operating permit program
- Review and issuance of Title V permits
- Implementation of specific CAA requirements applicable to Title V
- Compliance/enforcement of Title V-related requirements
- Administration of Title V fee program
- Small business technical assistance
- Other activities necessary for Title V operations

The matrix also lists air program activities which could be funded through federal grants if such funding was available. The categories of activity used for grants-eligible activities include, but are not limited to:

- Development / revision of permit requirements for non-Title V sources
- Permit review and issuance for non-Title V sources
- Implementation of specific CAA regulatory requirements

- Compliance / enforcement of CAA requirements not related to Title V
- Administration of grants and other forms of assistance
- CAA technical assistance to small businesses (outside of Title V)
- General and emerging air program activity

As a result of these limitations the Bureau must classify its activities and structure its budget in compliance with state and federal law and policy. The stakeholder group spent considerable time reviewing these allocations and sources with DNR staff. A significant number of concerns and questions regarding the allocation methodology were discussed. General committee opinion supported reserving Title V program revenue for Title V program costs, rather than diverting portions of those funds to pay for general state air quality programs.

In addition to limitations regarding the use of funds and the way the funding sources are associated, the Title V revenue stream is inherently limited. State rules (567 IAC 22.106) for Title V permit fees provide that "any person required to obtain a Title V permit shall pay an annual fee based on the total tons of actual emissions of each regulated air pollutant."<sup>2</sup> The fee is based on actual emissions required to be included in the Title V operating permit application and the annual emissions statement for the previous calendar year. It is calculated by multiplying the tonnage fee by the actual emissions reported by the facility, to a maximum of 4,000 tons. Emissions in excess of 4,000 tons are not included in the calculation.

The DNR staff reviews the Title V fee on an annual basis and recommends to the Environmental Protection Commission (EPC) a budget for their approval within the cap set by administrative rule. The budget and fee is based on what is necessary to cover all reasonable costs required to develop and administer the programs required by the Act. The Bureau submits the proposed budget for the following fiscal year to the EPC no later than the March meeting. The EPC sets the fee based on the reasonable cost to run the program and the proposed budget. Federal law (Title 42 USC Ch. 85 Sec. 7661a) stipulates the program must result in the collection, in aggregate, from all sources subject to the rules, an amount not less than \$25 per ton of each regulated pollutant. In Iowa, the fee is capped at \$56 per ton, and the DNR staff cannot recommend to EPC a fee that exceeds the cap unless it is raised through formal rulemaking. The state currently charges \$56 per ton, and this rate has remained unchanged for several years.

### 2. Performance of Revenue Sources

Since 1996, when the state was delegated the federally mandated air quality Title V Operating Permit Program, air pollution emissions fees (Title V fees) collected annually have supported about 75% of Bureau activities. In the 2013 calendar year, there were 295 permit holders paying this fee, and they reported emissions of 147,980 tons, yielding a total fee of \$8,317,224.<sup>3</sup> Typically about half of the group paying fees reports emissions of less than 100 tons. The majority of the fees are

<sup>2</sup> 567-22.106 (455B). The air contaminant source fund (455B.133B) receives the fees assessed and is "used solely to defray the costs related to the permit, monitoring, and inspection program, including the small business stationary source technical and environmental compliance assistance program required pursuant to the federal Clean Air Act Amendments of 1990, section 502, Pub. L. No. 101-549, and as provided in section 455B.133A. Any unexpended balance in the fund at the end of each fiscal year is retained in the fund. Any interest and earnings on investments from money in the fund is credited to the fund.

<sup>3</sup> Figures provided by the Air Quality Bureau, Iowa Department of Natural Resources, 11/5/2014.

paid by a small number of companies, mostly in the business of power generation, grain processing and heavy manufacturing. MidAmerican Energy Co., for example, paid 26.2% of the total fees due, while Interstate Power and Light Company paid 18.2%.

Between FY 2005 and FY 2015, these fees have generated a revenue stream ranging from \$7.6 to \$10.8 million per year. The highest generation rate was in FY 2010, when revenue peaked at \$10.8 million. Since then, revenue has declined by 22% to a projected \$8.4 million in FY 15.

The General Fund, a second source of funding for the Bureau, is appropriated by the Iowa General Assembly. Between FY 2005 and FY 2010, the allocation to the Bureau remained steady at \$1,288,000 per year. In FY 2011, however, it was reduced by 17.8% to \$1,058,000. In FY 2012 it was reduced another 33% to \$704,325. It has remained at \$704,325 since FY 2012. Overall, since FY 2005 Bureau revenue derived from the General Fund has declined by 45%.<sup>4</sup>

Federal funding provided through CAA Section 105 has ranged between \$1.1 and \$1.35 million annually between FY 2010 and the present. Although reductions were experienced between FY 2010 and FY 2011, and between FY 2013 and FY 2014, neither exceeded 8.8%. Between FY 2010 and FY 2014, funding has increased overall by 4%.<sup>5</sup>

### 3. Funding Outlook

Emissions from Title V facilities have declined since FY 2007. Further declines are projected due to changing federal regulations, including tightened NAAQS, and industry-specific rules such as those affecting coal fired power plants. Emissions subject to fees peaked at over 242,000 tons in 2005, and have declined by 37% through 2013. They are expected to level off at less than 60% of 2005 levels by 2016<sup>6</sup>. For fiscal year 2015, revenue from Title V fees have generated \$8,438,200.00 or 66% of the Bureau's revenues. Further declines are expected as long as sources continue to reduce emissions and the fee cap of \$56 per ton remains in place.

Federal grants continue to be a stable source of funding support, but have not increased to keep pace with inflation. Purchasing power has decreased by nearly 16 percent<sup>7</sup> between FY 2000 and FY 2014. Since grant funding supports many elements of state and local air quality efforts, including the personnel needed to run the programs, it is a critical component of the Bureau's budget but is not expected to increase.

On March 4, 2014 President Barack Obama proposed a budget for fiscal year (FY) 2015, which includes \$7.89 billion for EPA, representing a decrease in EPA's total budget of \$309.9 million below FY 2014 levels. The proposal includes \$243.2 million in federal grants to state and local air agencies under Sections 103 and 105 of the CAA, which is an increase of \$15 million above FY 2014 levels. While an increase is proposed, decreases in funding for core air programs are expected because new expense lines are included in the budget for Climate Action Planning, air

<sup>4</sup> Figures provided by the Air Quality Bureau, Iowa Department of Natural Resources, 11/5/2014.

<sup>5</sup> Figures provided by the Air Quality Bureau, Iowa Department of Natural Resources, 11/5/2014.

<sup>6</sup> DNR Air Quality Stakeholder Group Charter, prepared by the Air Quality Bureau, July 14, 2014.

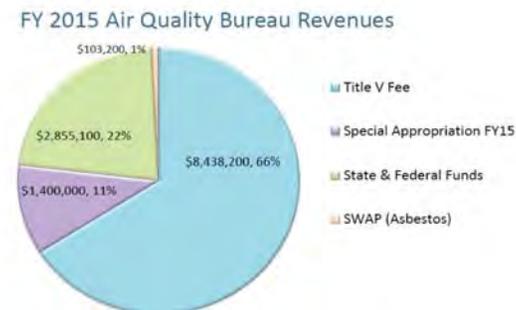
<sup>7</sup> Testimony of the National Association of Clean Air Agencies Provided to Senate Appropriations Committee, Regarding the FY 2015 Budget for US EPA, May 15, 2014.

grants for state greenhouse gas (GHG) permitting activities, and the collection and use of GHG emission data. The budget proposes a reduction of \$9.3 million in air grants for continuing environmental state programs, including the completion of monitoring networks and the compilation of updated emission inventories for updating State Implementation Plans (SIPs). A new formula for allocating state and local air grants among the regions is under consideration.

On September 18, 2014 Congress adopted a Continuing Resolution (CR) for FY 2015 (H.J. Res. 124) that will keep the federal government in operation from the end of the current fiscal year (September 30, 2014) until December 11, 2014. The CR calls for funding to continue at FY 2014 levels and generally carries existing policy riders through the CR period. Funding for state and local air grants under Sections 103 and 105 was \$228.2 million in FY 2014, so the CR continues funding at that rate until budget negotiations are concluded.

As the Department explained in their presentations, the Bureau is expected to face increasing budget pressure from several directions. With static emission fees and declines in emissions that are subject to fees, the Title V permit program fees will generate less revenue. Federal grants may remain stable, but payments have not kept up with inflation. State funds contributed an additional \$1.4M in FY 15 through a special appropriation<sup>8</sup>, but that was a one-time action. New and tightened regulations and new projects at facilities to comply with changing regulations will require more staff time. By 2019 the projected revenue shortfall will be approximately \$6 million.

The amount of each of the revenue source and their proportion relative to the total in FY 2015 are depicted in the following graphs provided by the Bureau:



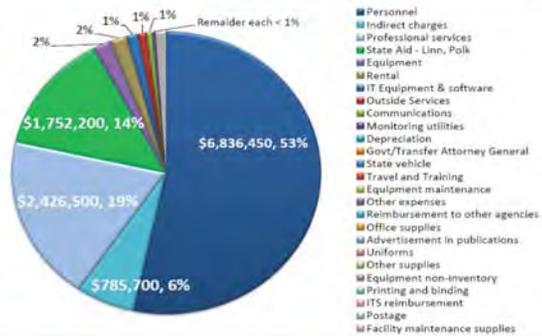
<sup>8</sup> Air Quality Budget Overview, prepared by Catharine Fitzsimmons, July 17, 2014.

Current and Projected<sup>1</sup> Revenues

| Funding Sources                | FY15                | FY16                | FY17                | FY18                | FY19                |
|--------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| FY15 Special Appropriation     | \$1,400,000         |                     |                     |                     |                     |
| Funding Shortfall <sup>2</sup> | \$0                 | \$2,839,500         | \$4,376,100         | \$5,414,400         | \$5,670,600         |
| Title V Emissions Fees         | \$8,441,400         | \$7,348,200         | \$6,059,400         | \$5,273,500         | \$5,274,500         |
| State Funds                    | \$1,232,500         | \$1,129,300         | \$1,129,300         | \$1,129,300         | \$1,129,300         |
| Federal Funds                  | \$1,722,600         | \$1,722,600         | \$1,722,600         | \$1,722,600         | \$1,722,600         |
| <b>Total Revenue</b>           | <b>\$12,796,500</b> | <b>\$13,039,600</b> | <b>\$13,287,400</b> | <b>\$13,539,800</b> | <b>\$13,797,000</b> |

- <sup>1</sup> Assumption for projections:
- Annual Expense increase for overall budget = 1.9% to maintain current services.
  - Title V Emission Fees remain at current rate (\$56/ton), 2013 tonnage estimates.
- <sup>2</sup> Funding Shortfall equals amount of additional funding needed to maintain status quo level of services.
- FY15 Funding shortfall projected at \$1,872,000 met with \$1.4M special appropriation plus \$500 carry-forward by holding vacancies.

FY2015 State Accounting of Budget: \$12,796,500



FY 2015 Programmatic Budget: \$12,796,500



Funding Sources for Program Areas



Although not referenced in the above graphic, Linn County and Polk County contribute a local match to the funding provided in the DNR Programmatic Budget. In FY15, Linn County contributed \$221,615 in local funds and Polk County contributed \$239,615.

C. Review of Current and Anticipated Bureau Expenses

1. Current Program Expenses

The Bureau's fiscal year begins on July 1 and ends on June 30 of each calendar year. The Department is currently in the FY15 budget cycle. The Department provided the Stakeholders Group with its current budget and identified all sources of Bureau revenue and expenses. Expenses are divided into five (5) broad categories related to program activity; 1.) Title V Operating Permits, 2.) Major Source Construction Permitting, 3.) PSD Permits, 4.) Minor Source Construction Permitting and 5.) Core Program Activities.

The table that appears on the next page separates expenses related to the five categories discussed above, with a break down by major task and an indication of how many full time equivalent employees (FTEs) are assigned to each program area. The first three program areas depicted with green headings are funded exclusively with Title V emissions fees as allowed by the CAA. The Minor Source Construction Permit program is depicted with a blue heading, and is currently funded by federal grants and matching state funds. The Core Program Activities, grouped under the purple heading, receive combined funding from all three sources.

The following pie chart depicts allocation of revenue to various expense categories. The most significant expense categories are: 1) personnel and indirect charges, at 59% of total, 2) professional services, 19% of total expenses and 3) state aid to the Linn and Polk County local programs, which uses 14% of the total budget.



The Bureau's FY 2015 expense budget by program areas is as follows. The permitting of major sources' construction activities through issuance of Title V operating permits and PSD permits represents 58% of the programmatic budget. Ambient air monitoring represents 17% of this budget and minor source permitting accounts for 8%.



The Air Quality Bureau's FY 2015 Projected Expenses and Funding Sources

| Title V Operating Permits (20.84 FTE)             |                   | Funding Source   |                  |                       |                  |
|---------------------------------------------------|-------------------|------------------|------------------|-----------------------|------------------|
| Expenses                                          | Title V Fee       | GF/FF            | Other            | Special Appropriation |                  |
| Application Review & Permit Issuance              | 1,041,600         | 847,700          | 0                | 0                     | 193,900          |
| Field Inspection                                  | 354,600           | 289,600          | 0                | 0                     | 65,000           |
| Compliance Assistance & Enforcement               | 409,600           | 333,300          | 0                | 0                     | 76,300           |
| Local Program Implementation of the CAA           | 1,417,000         | 1,163,200        | 0                | 0                     | 253,800          |
| Rules, Budget, Contracts                          | 185,100           | 134,400          | 0                | 0                     | 50,700           |
| Legal Services Activities                         | 46,100            | 39,100           | 0                | 0                     | 7,000            |
| Management, Secretarial & Data Support            | 253,000           | 202,500          | 0                | 0                     | 50,500           |
| <b>Subtotal</b>                                   | <b>3,689,000</b>  | <b>2,998,800</b> | <b>0</b>         | <b>0</b>              | <b>690,200</b>   |
| Major Source Construction Permitting (15.63 FTE)  |                   | Funding Source   |                  |                       |                  |
| Expenses                                          | Title V Fee       | GF/FF            | Other            | Special Appropriation |                  |
| Application Review & Permit Issuance              | 934,200           | 780,300          | 0                | 0                     | 153,900          |
| Modeling                                          | 99,300            | 80,800           | 0                | 0                     | 18,500           |
| Source Oriented Monitors                          | 445,400           | 362,500          | 0                | 0                     | 82,900           |
| Field Inspection                                  | 118,200           | 96,200           | 0                | 0                     | 22,000           |
| Compliance Assistance & Enforcement               | 184,300           | 150,000          | 0                | 0                     | 34,300           |
| Rules, Budget, Contracts                          | 138,400           | 112,600          | 0                | 0                     | 25,800           |
| Legal Services Activities                         | 41,700            | 33,900           | 0                | 0                     | 7,800            |
| Management, Secretarial & Data Support            | 253,000           | 202,600          | 0                | 0                     | 50,400           |
| <b>Subtotal</b>                                   | <b>2,214,500</b>  | <b>1,798,900</b> | <b>0</b>         | <b>0</b>              | <b>415,600</b>   |
| PSD Permits (10.58 FTE)                           |                   | Funding Source   |                  |                       |                  |
| Expenses                                          | Title V Fee       | GF/FF            | Other            | Special Appropriation |                  |
| Application Review & Permit Issuance              | 233,500           | 190,000          | 0                | 0                     | 43,500           |
| Modeling                                          | 99,300            | 80,800           | 0                | 0                     | 18,500           |
| Ambient Monitoring - PSD Background & Transport   | 349,300           | 284,300          | 0                | 0                     | 65,000           |
| Field Inspection                                  | 295,500           | 240,500          | 0                | 0                     | 55,000           |
| Compliance Assistance & Enforcement               | 102,400           | 83,300           | 0                | 0                     | 19,100           |
| Rules, Budget, Contracts                          | 138,400           | 112,600          | 0                | 0                     | 25,800           |
| Legal Services Activities                         | 41,700            | 33,900           | 0                | 0                     | 7,800            |
| Management, Secretarial & Data Support            | 253,000           | 202,600          | 0                | 0                     | 50,400           |
| <b>Subtotal</b>                                   | <b>1,513,100</b>  | <b>1,228,000</b> | <b>0</b>         | <b>0</b>              | <b>285,100</b>   |
| Minor Source Construction Permitting (8.69 FTE)   |                   | Funding Source   |                  |                       |                  |
| Expenses                                          | Title V Fee       | GF/FF            | Other            | Special Appropriation |                  |
| Application Review & Permit Issuance              | 406,700           | 0                | 406,000          | 0                     | 700              |
| Modeling                                          | 146,900           | 0                | 146,600          | 0                     | 300              |
| Field Inspection                                  | 177,300           | 0                | 177,000          | 0                     | 300              |
| Compliance Assistance & Enforcement               | 167,700           | 0                | 167,400          | 0                     | 300              |
| Legal Services Activities                         | 16,700            | 0                | 16,700           | 0                     | 0                |
| Management, Secretarial & Data Support            | 56,200            | 0                | 56,100           | 0                     | 100              |
| <b>Subtotal</b>                                   | <b>965,500</b>    | <b>0</b>         | <b>963,800</b>   | <b>0</b>              | <b>1,700</b>     |
| Core Program Activities (18.26 FTE)               |                   | Funding Source   |                  |                       |                  |
| Expenses                                          | Title V Fee       | GF/FF            | Other            | Special Appropriation |                  |
| Complaint Response                                | 177,300           | 0                | 177,300          | 0                     | 0                |
| Compliance Assistance & Enforcement               | 67,600            | 0                | 67,500           | 0                     | 100              |
| Asbestos                                          | 111,800           | 0                | 8,600            | 103,200               | 0                |
| Local Program Implementation of the CAA           | 335,200           | 0                | 335,200          | 0                     | 0                |
| EIQ (AERR requirement: CAA 110 & 172)             | 425,500           | 374,800          | 50,000           | 0                     | 700              |
| Ambient Monitoring - Population oriented monitors | 2,122,200         | 1,145,900        | 972,700          | 0                     | 3,600            |
| Rules, Budget, Contracts                          | 166,000           | 151,500          | 14,200           | 0                     | 300              |
| AQB/UNI/ Small Business Assistance                | 365,900           | 287,700          | 85,200           | 0                     | 0                |
| SIP Activities                                    | 463,100           | 347,300          | 115,000          | 0                     | 800              |
| Legal Services Activities                         | 48,200            | 9,900            | 38,400           | 0                     | 1,900            |
| Management, Secretarial & Data Support            | 140,600           | 105,500          | 35,100           | 0                     | 0                |
| <b>Subtotal</b>                                   | <b>4,414,400</b>  | <b>2,402,600</b> | <b>1,901,200</b> | <b>103,200</b>        | <b>7,400</b>     |
| <b>Overall Total</b>                              | <b>12,796,500</b> | <b>8,428,300</b> | <b>2,865,000</b> | <b>103,200</b>        | <b>1,400,000</b> |

## 2. Additional Funding Needs

The Bureau has identified additional funding needs for the implementation of the air quality program for fiscal years 2016 – 2024. Authorizing these proposed expenditures will allow the Bureau to ensure:

- Efficient, reliable service to citizens of the state, and
- Iowa's compliance with the requirements of new federal laws, maintaining Iowa's ability to operate an air program independently without loss of delegation to the federal level.

### Construction Permit Backlog

One of the primary responsibilities of the Bureau is to authorize construction permits for new sources in the state. Delaying issuance of a construction permit can cost businesses time, money and opportunities to grow and prosper. As of the date of this report, the five year average time necessary for issuance of standard projects is 61 days, while the goal for issuance of these projects is 30 days. The five year average time necessary to issue a complex construction permit projects is 242 days, while the goal is 180 days. During the last five years the average number of permits per project for standard and complex construction permit projects has been 2.6 and 6.4, respectively.

The backlog exists because:

- Staff positions for one Senior Environmental Engineer and two Environmental Engineers were only recently filled. One Environmental Engineer position remains unfilled but will be filled before the end of the calendar year;
- New staff is understandably less efficient and requires training to reach their full potential.
- An estimated 20% of an engineer's time is spent providing tasks unrelated to permitting. This includes assisting with applicability determinations, emissions estimation, consulting on economic development projects, reviewing and assisting county/municipal air quality programs, development of State Implementation and Nonattainment plans and participating in governmental processes for new rulemaking.

Permit applicants notice this backlog at the Bureau, and their frustrations are documented in online customer surveys conducted between 2012 and 2014<sup>9</sup>. During this time, with 109 surveys completed (10% of survey audience), 18 of 101 comments (18%) listed permit process delays either as a main concern about the Bureau or as the area most needing improvement. Their comments include, for example:

- "The permit was in queue for several weeks before it got picked up,"
- "Application sat for several months before being assigned,"
- "I have permits still in process that are 8 months from date of application,"
- "The turnaround time to obtain permits is getting longer and longer"
- "The length of the process makes it hard to respond to business opportunities."

<sup>9</sup> Bureau customers are invited to provide feedback through an online survey. The data collected has been aggregated in the Construction Permit Survey Report 2012-2014 completed by the Air Quality Bureau.

### Construction Permit Project Backlog Projection

The 3-year monthly average for 2011-2013 was used as the baseline, and 1% growth in # of projects received is projected.



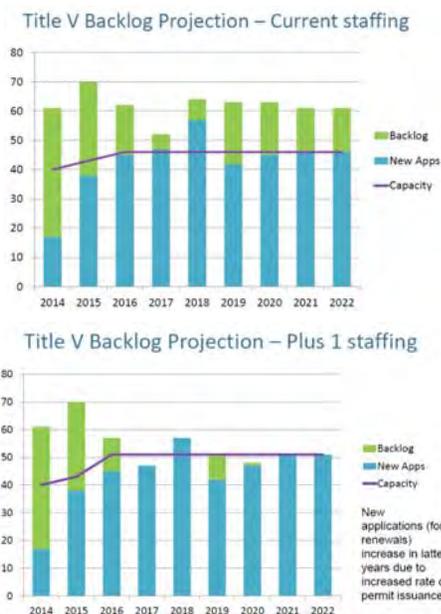
As indicated by the graph above, the backlog of applications can be eliminated by the last quarter of 2016 if the group remains fully staffed and engineers are not asked to perform new tasks<sup>10</sup>.

### Title V Permit Backlog

The Title V permit program has a backlog of more than thirty (30) applications. The agency takes between 8 and 14 months to process a Title V permit application, which is within its goal of 18 months to process. New applications, however, may sit for up to 5 months before processing begins because permit writers are not available to work on the project. The 5-year average processing time ranges between 13 and 20 months when this delay is included. As with construction permitting, the primary causes of this backlog are lack of staffing and training.

This service area was fully staffed at the time of this report. Eliminating the backlog would require the addition of one environmental specialist at a cost of \$120,000.00 annually including salary, benefits, DNR indirect charges, training, and the resources to perform the job. If that staff position is added and training is completed, the Bureau would have the Title V permit application backlog under control by 2017. After control is achieved, the position could be used to offer expedited service to process or modify applications for important business projects. Without additional resources, the backlog is projected to continue indefinitely.

<sup>10</sup> DNR materials indicate that staff hours not funded at this time will be needed to comply with the new SO<sub>2</sub> and ozone data requirements and the new Carbon standards. See next section for details.



### Information Technology/SPARS/SLEIS

The State Permitting and Air Reporting System (SPARS) was developed in the late 1990s and has been web-based since 2006. Facilities subject to air quality rules use SPARS to submit permit applications and emissions inventories online, track permit status, obtain copies of permit documents and make specialized queries for planning, modeling and information. National Emissions Inventory data is maintained on SPARS, and the system shares data with other DNR systems.

Although initially valued for its ability to provide online connectivity and facilitate the permit programs, the system has aged and become a risk to the Bureau and businesses. Risk exists in the areas of:

- System sustainability and continuity. The software is no longer supported by the developer, and the uniqueness of the programming code limits the number of specialists with the technical ability to make system repairs. Unrecoverable system crashes may occur if bugs or data corruption cannot be addressed by the available technicians.

- SPARS User Security. SPARS forces users to reduce the security settings of their computers, putting their systems at risk. It also requires Internet Explorer, and does not support Firefox or other alternate browsers unless the user is willing to find and install "work around" programming developed by after-market specialists.
- CROMERR non-compliant. The Cross Media Electronic Reporting Rule, found at 40 CFR Part 3, was created to provide a legal framework for electronic reporting under all of the EPA's environmental regulations. It sets standards related to system function and security to ensure that electronic submittals and paper submittals have the same level of legal dependability. SPAR does not meet this standard, although compliance was due in January, 2010.

As an interim measure, the state has applied for, and received, a grant from the EPA Exchange Network for the deployment of a new software package, called SLEIS, in 2015. The State & Local Emissions Inventory System (SLEIS) is the "off the shelf" result of a collaborative project by 6 states and the consulting company Windsor Solutions. It is CROMERR-compliant, offers little risk, and provides a well-designed interface to address the emissions inventory element in SPARS. It does not fulfill the need for system functionality in the areas of construction permits, Title V Permits, or other data systems.

The Bureau intends to install the SLEIS software on a test server in January 2015. The system will then be loaded with data copied from the SPARS system (providing a SPARS data backup file) and in-house testing will occur through September 2015. Both systems will continue operating until SPARS is replaced or it becomes non-functional. Under best-case scenarios, SPARS will cost \$30,000 per year to maintain, and SLEIS will cost about \$40,000, for a combined total annual maintenance cost of \$70,000.00. Replacement systems will be evaluated in part on their ability to provide a positive return on investment (ROI).

The Bureau designated a task force to evaluate possible solutions to this issue. Early in the process, the group sent out a Request for Information, and seventeen (17) vendors offered solutions ranging from customizing SPARS with a re-write of the system to providing an off-the-shelf alternative. Costs ranged between \$500,000 to \$2 million. This group also conducted a survey of SPARS users to evaluate the system. Nearly 160 users responded. Sixty (60) prioritized functionality related to uploading facility and emissions data, and about forty (40) prioritized the redesign of SPARS data entry screens to match the paper forms used by DNR.

The task force continues to study options. Their hope is to continue using SLEIS and find software that can fill the gap in functionality that exists between SLEIS and SPARS. If a replacement cannot be found, the Department has budgeted two scenarios with regard to SPARS. A limited functionality replacement would cost a total of \$500,000 in FYs 2018 and 2019. A full functionality replacement of SPARS is estimated to cost a total of \$2 million in the three FYs 2018 – 2020.

## Attainment with National Ambient Air Quality Standards (NAAQS)

EPA sets the NAAQS to protect outdoor air quality across the nation. NAAQS are not emission limits. They are uniform, nation-wide performance standards that help define what “clean air” is and provide a minimum target for agencies administering air programs<sup>11</sup>. Primary standards are set to protect human health. Secondary standards protect the public welfare, including protection against visual impairment, damage to animals, crops and buildings. Areas that comply with a NAAQS standard are “in attainment” for that standard, while those that do not meet the standard are in “non-attainment.” The CAA requires EPA periodically review the standards to reevaluate the science and update the standards. Considering the cost of implementation is prohibited by federal law. In recent years, the NAAQS for Particulate Matter (PM<sub>2.5</sub>) and Sulfur Dioxide (SO<sub>2</sub>) have been tightened. EPA is evaluating the standard for Ozone (O<sub>3</sub>) and Nitrogen Oxides (NO<sub>x</sub>).

EPA is under a court order to propose any revisions to the standard for ground-level Ozone by December 1, 2014 and to complete the rulemaking process by December 2015.<sup>12</sup> At the current level, set in March 2008 at 75 parts per billion (ppb), 46 areas in the nation have not met the standard, but all areas in Iowa are in attainment. The Clean Air Scientific Advisory Committee (CASAC) Ozone Review Panel, however, has concluded that “there is adequate scientific evidence to recommend a range of levels for a revised primary ozone standard from 70 ppb to 60 ppb.”<sup>13</sup> Depending on the limits adopted, the Department may need to replace the ozone monitors in its monitoring network (47 total) with newer models capable of proving attainment status with certainty and precision. Replacement of the monitors could cost as much as \$592,200. The State’s recommendations for designations and nonattainment boundaries, if required, will be due to EPA by October 2016. Nonattainment plan elements will be submitted to EPA by the implementing agencies in early 2020.

EPA first set standards for SO<sub>2</sub> in 1971. EPA set a 24-hour primary standard at 140 ppb (parts per billion) and an annual average standard at 30 ppb (to protect health). EPA also set a 3-hour average secondary standard at 500 ppb (to protect the public welfare). In 2010, EPA significantly revised the primary SO<sub>2</sub> NAAQS by establishing a new 1-hour standard at a level of 75 ppb. The Bureau may characterize air quality using either modeling of actual source emissions or ambient air quality monitors. Iowa is required to identify SO<sub>2</sub> sources in the state and indicate whether each source will be characterized by modelling or new monitors. If the agency uses monitoring, both the equipment and data must satisfy the new EPA Data Requirements Rule, published in May 2014<sup>14</sup>. If DNR chooses to use monitors, they must be operational by January 2017, and certified monitoring data for 2017-2019 is due by May 2020.

<sup>11</sup> NAAQS exist for the six criteria pollutants identified in the CAA and discussed earlier in the report. <http://www.epa.gov/air/urbanair/>

<sup>12</sup> Congressional Research Service, “Ozone Air Quality Standards: EPA’s 2015 Revision,” p. 1.

<sup>13</sup> “CASAC Review of the EPA’s Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards,” June 26, 2014, p. 2.

<sup>14</sup> Fed Register, May 13, 2014, 40 CFR Part 51, Data Requirements Rule for the 1-Hour Sulfur Dioxide Primary NAAQS: proposed, <http://www.gpo.gov/fdsys/pkg/FR-2014-05-13/pdf/2014-09458.pdf>

## National Emission Standards for Hazardous Air Pollutants - Asbestos

### Revitalizing Communities

Iowa adopted the federal asbestos standard (NESHAP) requiring inspections and the proper removal of asbestos (over specified quantities) from all demolition or renovation projects in commercial structures and certain types of multi-family dwellings. Community revitalization efforts often uncover both old and recently installed materials containing asbestos. Since 2009, the Bureau has received an increasing number of asbestos notifications for building demolitions and renovations. Staffing in this program area has been cut from two (2) inspectors to one (1) due to declining program funds. As a result there is less oversight of regulated asbestos projects and the Department’s ability to help prevent asbestos exposure has been reduced.



The DNR currently prioritizes projects with the greatest potential for exposure to children and large numbers of individuals. To meet the agency’s goal of inspecting 5% of the asbestos removal projects, they would need to conduct 225 inspections and have three times the current number of staff. The cost to maintain an additional asbestos inspector (environmental specialist) is about \$130,000 per year including salary, benefits, training, a vehicle, computer equipment, safety equipment, and indirect costs.

Since 2011, the Department’s SWAP (solid waste alternatives program) has funded the asbestos inspector’s personnel cost. Funding challenges in the SWAP program make this an unsustainable option for the future. Stakeholders generally agreed in the importance of the asbestos program and improving the rate of inspections. Currently no fees are charged for this program.

### EPA’s Proposed Clean Power Plan<sup>15</sup> (Clean Air Act, Section 111d)

On June 2, 2014, EPA proposed guidelines for states addressing greenhouse gas emissions from existing fossil fuel-fired electric generating units. Section 111(d) requires each state, with assistance from EPA, to develop “standards of performance” for existing stationary sources and an

<sup>15</sup> Proposal: Carbon Pollution Emissions Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Posted June 18, 2014, 40 CFR Part 60, Fed. Reg. Number: 2014-13726, <https://www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating>.

implementation plan to achieve those standards. The plan can rely on any mix of strategies aimed at reductions, including:

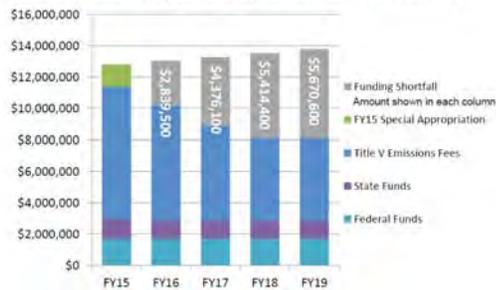
1. Making fossil fuel power plants more efficient.
2. Using low-emitting natural gas combined cycle plants where excess capacity is available.
3. Increasing use of zero- and low-emitting power sources such as renewables and nuclear.
4. Reducing electricity demand by using electricity more efficiently.

The Bureau must prepare an implementation plan after the final rule is issued. The projected expenditure for this project over several years is an estimated \$400 - \$450,000. Electric generating facilities located throughout Iowa will be affected. The number of facilities impacted is uncertain at this time since power plant retirements have occurred or are scheduled, and fuel switching projects are underway.

### 3. Budget Summary

Between 2016 and 2024, the Bureau anticipates needing additional revenue ranging between \$2.5 and \$7 million per year if existing programs remain in place and all new programs are fully implemented at the highest cost option. FY 2019 appears to be the most challenging in terms of fiscal need, since several new programs have milestone due dates at that time. As a result, by FY 2019 the Bureau anticipates a shortfall of nearly \$6.0 million per year just to maintain current services, not including the additional expenses discussed in this report.

Current and Projected Expenses and Revenues



The following table itemizes projects and compliance alternatives that may occur between FY 2016 and FY 2024. This document was provided for scenario planning, and should not be aggregated by year as an expense projection. Some options are mutually exclusive, such as the different functionalities in a SPARs replacement and the choices of strategy between monitoring and modeling for SO<sub>2</sub> compliance. The identification and delineation of non-attainment areas related to specific NAAQS cannot be completed until the EPA finalizes the standard.

| Program Activity                                 | FY 2016     | FY 2017     | FY 2018     | FY 2019     | FY 2020     | FY 2021     | FY 2022     | FY 2023   | FY 2024   |
|--------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
| (Alternate approaches or costs)                  | CY15-16     | CY16-17     | CY17-18     | CY18-19     | CY19-20     | CY20-21     | CY21-22     | CY22-23   | CY23-24   |
| <b>SO2 Data Requirements Rule</b>                |             |             |             |             |             |             |             |           |           |
| Attainment Evaluation - Dispersion Modeling      | \$47,400    | \$47,400    |             |             |             |             |             |           |           |
| Nonattainment Planning Each Site                 |             | \$64,000    | \$119,000   | \$237,000   | \$54,000    | \$6,400     | \$6,400     | \$6,400   | \$6,400   |
| Nonattainment Planning 12 Sites                  |             | \$768,000   | \$1,428,000 | \$2,844,000 | \$648,000   | \$76,800    | \$76,800    | \$76,800  | \$76,800  |
| Attainment Evaluation - Ambient Monitoring       | \$1,161,600 | \$576,000   | \$576,000   | \$576,000   | \$432,000   |             |             |           |           |
| Nonattainment Planning Each Site                 |             |             |             |             | \$44,000    | \$119,000   | \$237,000   | \$54,000  | \$6,400   |
| Nonattainment Planning 12 Sites                  |             |             |             |             | \$768,000   | \$1,428,000 | \$2,844,000 | \$648,000 | \$76,800  |
| <b>Revitalizing Communities - Asbestos</b>       |             |             |             |             |             |             |             |           |           |
| Current staffing (no SWAP funding)               | \$130,000   | \$130,000   | \$130,000   | \$130,000   | \$130,000   | \$130,000   | \$130,000   | \$130,000 | \$130,000 |
| Fund for 5% inspection rate                      | \$390,000   | \$390,000   | \$390,000   | \$390,000   | \$390,000   | \$390,000   | \$390,000   | \$390,000 | \$390,000 |
| <b>Revised Ozone Standard</b>                    |             |             |             |             |             |             |             |           |           |
| Updated Ozone Monitors to address stds           | \$592,200   |             |             |             |             |             |             |           |           |
| Nonattainment Planning for 1 areas               | \$32,000    | \$151,000   | \$237,000   | \$237,000   | \$145,548   | \$33,000    | \$6,400     | \$6,400   | \$6,400   |
| Nonattainment Planning for 9 areas               | \$268,000   | \$1,359,000 | \$2,133,000 | \$2,133,000 | \$1,309,932 | \$297,000   | \$57,600    | \$57,600  | \$57,600  |
| <b>Title V Permit</b>                            |             |             |             |             |             |             |             |           |           |
| Backlog & Modifications                          | \$120,000   | \$120,000   | \$120,000   | \$120,000   | \$120,000   | \$120,000   | \$120,000   | \$120,000 | \$120,000 |
| <b>Information Technology</b>                    |             |             |             |             |             |             |             |           |           |
| Limited functionality SPARs replacement          |             |             | \$100,000   | \$400,000   |             |             |             |           |           |
| Full functionality SPARs replacement             |             |             | \$100,000   | \$1,500,000 | \$400,000   |             |             |           |           |
| <b>Carbon Standards for Existing EGUs 111(d)</b> |             |             |             |             |             |             |             |           |           |
| Within Iowa only implementation                  | \$237,000   | \$237,000   | \$237,000   | \$237,000   | \$174,000   | \$174,000   | \$174,000   | \$174,000 | \$174,000 |
| Multistate implementation (costs unknown)        |             |             |             |             |             |             |             |           |           |

What is clear from the Department's presentation is that the present funding strategy is not adequate to meet near or long-term program needs nor the needs of the regulated facilities.

## D. Process Improvements and Cost Reduction

### 1. Title V Program Efficiencies

In 2012, stakeholders participated in a Kaizen<sup>16</sup> event to streamline the Title V permit application process. The resulting process improvements included bureau-wide coordination of the process, revised application instructions, and additional training. Most significantly, the Bureau condensed Part 2 application forms from 20 to 6. These new forms were easier to use, allowed more flexibility in data presentation and resulted in a faster, more seamless permitting process.

The Bureau has also used two strategies to minimize the number of facilities subject to the program. First, they eliminated the Voluntary Operating Permit (VOP) program, which allowed sources to voluntarily avoid participation in the Title V program by accepting permit limits to stay out of the Title V program. Second, they helped facilities exit the program.

Two facilities have been selected as pilot projects to remove smaller Title V sources from the Title V program. The Department and the facilities will establish construction permit limits to ensure potential emissions are below Title V thresholds and then rescind the Title V permits. A protocol developed from the pilot projects will be shared with the remaining eligible facilities, and those facilities will determine whether they wish to exit the program.

The Bureau will continue looking for additional improvements to the Title V permit program through collaboration with its industry partners. Meanwhile, these initiatives will allow the DNR to focus on the largest facilities, provide better services to those companies that remain in the program without compromising air quality, and increase efficiency as participants decline.

### 2. Construction Permitting Program Efficiencies

The Bureau has hosted six (6) formal Kaizen events since 2003 to examine construction permitting services and recommend improvements. The goals of the improvement initiative are to:

- Increase the permit issuance rate (i.e. shorten lead time by 25%)
- Improve communications with applicants and the public
- Improve consistency in permits,
- Reduce requests for additional information, and
- Eliminate activities that contribute little or no value to the process.

A survey conducted in 2013–2014 revealed that about 10% of survey respondents found the construction permit application process difficult or confusing. This was corroborated by 2014

<sup>16</sup> Kaizen, also known as continuous improvement, is an approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality. Kaizen events gather operators, managers & owners of processes to map existing processes, identify improvements & obtain buy-in from affected parties.

Construction Permit Tracking Data which showed that applications commonly failed to provide complete information.

Measures have been put in place to reduce applicant questions and requests for additional information. The Construction Permit Section is streamlining forms and instructions. A stakeholder workgroup is reviewing each form and each set of instructions to ensure consistency, improve simplicity, eliminate information requests that are no longer needed and add requests when new information is required. The Bureau has also been assisted by industries in establishing template permit applications for grain elevators, bulk gasoline distribution facilities, and aggregate asphalt and concrete batch plants. These templates also reduce the resources needed to issue a permit.

The Bureau will meet with stakeholders for the remainder of the year and then open an informal process to solicit comments at the Air Quality Client Contact meeting in November 2014. Following this comment period, the forms will be reviewed and formatted for publication. The Department plans to provide training and make the new forms and instructions available in 2015.

### 3. Emission Inventory and Support Section Savings

The Emission Inventory and Support Section has also improved and streamlined their processes to ensure an efficient, accurate reporting structure. This group has:

- Provided increased technical support
- Developed online calculators that accurately calculate emissions
- Supported industry e-reporting needs by hosting specialized webinar training
- Reduced industry reporting by prioritizing and streamlining reporting requirements, and
- Reviewed and corrected EPA miscalculations to prevent transfer of those errors into the state system.

They estimate that the reporting burden has been reduced by 57% and corrections to EPA data have reduced reported emissions by 197,000 tons. The Section reported that the Bureau also cut costs by nearly \$100,000 through a reduction in the Bureau's fleet from seven to four vehicles (~\$60,000) and changes to its phones (\$1,800), IT (~\$31,000), records retention (~\$37,000), copiers (\$3,270) and courier services (\$3,500).

### 4. Dispersion Modeling

The Bureau has taken steps to track current and future modeling projects to reduce review times, improve workload balance, and ensure the expertise of staff completing modeling:

- Advanced software and equipment allow completion of modeling runs up to twelve times (12x) faster.
- Implementation of the Modeling Computer Array software lets analysts work on two or more projects at same time.
- Preprocessed meteorological data from nineteen (19) Iowa meteorological stations ensures statewide coverage.

- Digital Terrain Elevation Data is available for all Iowa counties, and statewide background air quality data creates default backgrounds for models.
- Guidance documents and compliance tools have been created to reduce regulatory uncertainty.

### 5. Other Cost Containment Activities

The Bureau has identified numerous cost containment and reduction measures since 2008, resulting in total cost reductions of more than \$2.2 million. The various staffing, IT, management and other cost saving measures are listed below:

#### Cost Containment & Reduction

| Expenditure Category           | Cost Containment and Reductions                                                                | Amount       |
|--------------------------------|------------------------------------------------------------------------------------------------|--------------|
| Staffing & Contract Reductions | Brought small business regulatory assistance role in-house from IECA.                          | -\$119,000   |
| Staffing & Contract Reductions | Reduced UNI small business technical assistance contract services.                             | -\$155,000   |
| Staffing & Contract Reductions | Eliminated 10 vacant FTE position by selectively retaining vacancies to meet reduced revenues. | -\$1,711,000 |
| Information Technology         | Streamlined software licenses & needs for remote computer access in 2009 saved \$5,000.        | -\$25,000    |
| Information Technology         | Eliminated an Oracle license in 2012 for SPARS.                                                | -\$9,000     |
| Information Technology         | Consolidated server & licensing needs within the DNR.                                          | -\$20,000    |
| Office Management              | Leasing a copier saved \$3,000 due to lower impression rates.                                  | -\$3,000     |
| Office Management              | Reusing office supplies from scanned records.                                                  | -\$7,000     |

#### Cost Containment & Reduction Cont.

| Expenditure Category         | Cost Containment and Reductions                                                                                                                       | Amount              |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Office Management            | A phone audit in 2009 resulted in an annual savings of up to \$1,200.                                                                                 | -\$8,000            |
| Office Management            | In 2013 DAS renegotiated a courier contract at double the prior rate. DNR identified cost increase. DAS reduced the rate.                             | -\$3,500            |
| Public Records               | DNR requested changes that resulted in a change in records retention schedules from permanent files to a defined periods. Reduced microfilming costs. | -\$30,000           |
| In-state Travel              | In-state travel reduced. Relying on conference calls or asking clients to travel.                                                                     | -\$50,000           |
| Equipment                    | Obtained monitoring equipment cost reductions.                                                                                                        | -\$3,000            |
| Training                     | Utilizing webinar training more extensively.                                                                                                          | -\$10,000           |
| Vehicles                     | Reduced bureau cars from 7 to 4 vehicles saving replacement cost of 2 vehicles.                                                                       | -\$80,000           |
| <b>Total Cost Reductions</b> |                                                                                                                                                       | <b>-\$2,211,500</b> |

The Bureau continues to demonstrate its commitment to control costs and efficiently use funding sources to preserve the quality of air in the State of Iowa. The Stakeholder Committee reviewed extensive data provided by the Bureau and believes that cost control is being achieved efficiently and effectively, and that the Bureau should continue to pursue future cost control measures and activities to improve efficiency.

## E. Fee Structure Benchmarking

### 1. Benchmarking Against States

As discussed in Section B of this report, the Bureau has three sources of operational funding: Title V fees for emissions of pollutants, federal grants issued under the CAA and funds authorized by the Iowa General Assembly. The air quality program only charges fees for emissions as required by Title V. Other services including permit application processing for major or minor sources, modelling, authorizing prevention of significant deterioration (PSD) permits, processing emission inventory reports, or conducting ambient air monitoring are provided free of charge.

The Bureau benchmarked their funding structure against those of other states to gather an accurate picture of the fee programs available. Twenty four (24) states responded to the Bureau's request for information. Of these, thirteen (13) programs<sup>17</sup> were selected for analysis based upon their location and/or similarity to Iowa regarding population or GDP. The Bureau separately analyzed fees related to construction permits and Title V permits as these would be administered separately within the Bureau.

### Construction Permit Fee Structures

The states used for benchmarking had a wide variety of approaches to generate revenue, but certain trends were identified. Of the thirteen states identified as "similar" to Iowa:

| Fee Structure for Construction Permits                                                                                                                                                                                                                                                            | % with this feature |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Providing free service to all, regardless of service type                                                                                                                                                                                                                                         | 0%                  |
| Issuing small source permits with no fee                                                                                                                                                                                                                                                          | 0%                  |
| Charging a fee for a registration permit                                                                                                                                                                                                                                                          | 85%                 |
| Charging an initial fee to begin any application process                                                                                                                                                                                                                                          | 23%                 |
| Assessing a specific, single amount for each type of permit                                                                                                                                                                                                                                       | 13%                 |
| Assessing annual and/or emission fees on non-Title V sources                                                                                                                                                                                                                                      | 38%                 |
| Scaling fees according to one specific variable, such as hours required to complete the service, projected increase in emissions, allowable limits, emissions potential of the source being permitted, % of capital cost, or an assigned "points" value that weighted the complexity of the task. | 54%                 |
| Charging specific fees for various process steps such as NSPS Review, PSD review, modeling protocol review, modeling data review, obtaining weather data, administering public comment, public hearing attendance, and permit preparation                                                         | 54%                 |
| Utilizing a spreadsheet calculator to determine the fee                                                                                                                                                                                                                                           | 31%                 |

<sup>17</sup> The states selected were Alabama, Arkansas, Colorado, Delaware, Illinois, Kansas, Minnesota, Missouri, Nebraska, New Mexico, South Dakota, West Virginia and Wisconsin.

Seven states also provided information regarding the assessment of annual or emission fees. Of the states charging annual or emission fees:

| Fee Structure Feature                                                  | % with this feature |
|------------------------------------------------------------------------|---------------------|
| Using the allowable permit limits as the basis for the fee             | 30%                 |
| Using the emissions reported in the inventory as the basis for the fee | 15%                 |
| Waiving fees for certain small sources                                 | 15%                 |
| Charging a general "annual fee" to operate in the state                | 88%                 |
| Controlling or capping the fee                                         | 63%                 |

### Title V Permit Fee Structures

Of thirteen states used for benchmarking, all but one state (92%) charged a fee for a Title V operating permit. More than 60% used actual emissions to calculate the fee, and about 40% used allowable limits as the alternate basis. Most systems (85%) capped between 4,000 and 6,000 tons the maximum tonnage that could be assessed a fee.

#### Title V Fee Information

| State         | Fee                                            | Basis                                      |
|---------------|------------------------------------------------|--------------------------------------------|
| Alabama       | \$37                                           | Actual; 4,000 ton cap.                     |
| Arkansas      | \$22.97                                        | Allowable; 4,000 ton cap.                  |
| Colorado      | \$22.90/ \$152.90 (HAPs)                       | Actual; 4,000 ton cap.                     |
| Delaware      | No fee per ton. Charges a base fee & user fee. |                                            |
| Illinois      | \$21.50                                        | Allowable, max of \$294,000.               |
| Iowa          | \$56                                           | Actual; 4,000 ton cap.                     |
| Kansas        | \$37                                           | Actual; 4,000 ton cap.                     |
| Minnesota     | \$85.17                                        | 4,000 ton cap.                             |
| Missouri      | \$40                                           | Actual; 4,000 ton cap with 12,000 ton max. |
| Nebraska      | \$67                                           | Actual; 4,000 ton cap.                     |
| South Dakota  | \$7.50/ \$40 (ethanol)                         | Actual; 4,000 ton cap. Annual admin fees.  |
| New Mexico    | \$29.30/ \$186.25 (HAPs)                       | Allowable; 6,000 ton cap.                  |
| West Virginia | \$31.87                                        | Actual; 4,000 ton cap; minimum fees.       |
| Wisconsin     | \$35.71                                        | Actual; 5,000 ton cap.                     |

### Scenario-Specific Comparisons

Since the fee structures varied so widely, the Bureau asked for scenario-specific calculation of fees by the responding states. Those scenarios were:

- a) A registration permit with little or no review
- b) A permit for a new facility not subject to Title V or PSD with three emission points
- c) A new facility not subject to Title V or PSD with three emission points involving one NSPS and one NESHAP determination,

- d) An existing facility subject to Title V and PSD with three new emission points that require limits on three pollutants to avoid Title V and/or PSD (synthetic minor), and
- e) An existing PSD—major facility with a PSD major modification for three pollutants involving three emission points all subject to one NSPS and one NESHAP and
- f) A new PSD—major facility that is an electrical generating unit (EGU).

#### Application Scenario: a. Registration permit

| A registration permit with little or no review. |                                   |
|-------------------------------------------------|-----------------------------------|
| Alabama                                         | About \$1,000                     |
| Arkansas                                        | \$200                             |
| Colorado                                        | Range from \$202.90 to \$1,152.90 |
| Delaware                                        | No fee                            |
| Illinois                                        | \$235                             |
| Iowa                                            | No fee                            |
| Kansas                                          | No fee                            |
| Minnesota                                       | \$570                             |
| Missouri                                        | \$700 (permit by rule)            |
| Nebraska                                        | \$875                             |
| New Mexico                                      | \$500 (filing fee)                |
| South Dakota                                    | \$125 application fee.            |
| West Virginia                                   | \$250-\$500                       |
| Wisconsin                                       | \$400                             |

#### Application Scenario: b. Minor Project

| A new facility not subject to Title V or PSD with three emission points |                                        |
|-------------------------------------------------------------------------|----------------------------------------|
| Alabama                                                                 | \$7,055                                |
| Arkansas                                                                | \$22.97 per ton of allowable emissions |
| Colorado                                                                | \$152.90 + \$76.45/hour                |
| Delaware                                                                | \$1,140                                |
| Illinois                                                                | \$1,500 - \$11,000                     |
| Iowa                                                                    | No fee                                 |
| Kansas                                                                  | 0.05% of the capital cost              |
| Minnesota                                                               | \$14,250 (minimum)                     |
| Missouri                                                                | \$100 + \$50/hour                      |
| Nebraska                                                                | \$250 - \$1,500                        |
| New Mexico                                                              | \$6,502                                |
| South Dakota                                                            | \$125                                  |
| West Virginia                                                           | \$1,000                                |
| Wisconsin                                                               | \$11,400                               |

## 2. Internal DNR Benchmarking

### Comparing Revenue Allocation

The configuration of the Bureau budget was benchmarked to Bureaus within DNR by comparing allocations to the Bureau with revenue provided to the Field Services, Land Quality and Water Quality Bureaus in the FY 2015 budget. The Field Services, Land Quality and Water Quality Bureaus received between \$1.1 and \$2.1 million more funding in FY 2015 from the Environment First & Infrastructure Funds, and received between \$2.8 and \$6.8 million more from federal grants.<sup>18</sup> The Bureau relied on fees as a primary source of revenue, collecting more than \$8.4 million in fees (66% of budget), compared to the Land Quality Bureau that collected \$863,000 (6% of budget) and Water Quality that collected \$7.3 million (39% of budget).

Dependence on emission fees has the potential to create significant inequity because the impact of the fees is concentrated, while the impact of fees charged by other Bureaus is spread across a larger customer base. Data from the FY 2012 budget, for example, indicate the Bureau derived its income from less than 300 sources, paying annually, compared to the Land Bureau that generated its fee from more than 9,500 transactions<sup>19</sup> and the Water Bureau that obtained its revenue from more than 21,000 transactions.

| FY 15 Budget                                           | Air Quality Bureau            | Field Services Bureau | Land Quality Bureau | Water Quality Bureau |
|--------------------------------------------------------|-------------------------------|-----------------------|---------------------|----------------------|
| State General Funds                                    | \$704,300 6%                  | \$1,193,700 10%       | \$410,000 3%        | \$392,300 2%         |
| Environment First & Infrastructure Funds <sup>20</sup> | \$425,000 3%                  | \$1,532,200 13%       | \$2,533,800 18%     | \$2,500,000 13%      |
| Groundwater*                                           | \$1,503,200 <sup>21</sup> 12% | \$767,700 6%          | \$3,459,700 24%     | \$97,100 1%          |
| Federal Grants                                         | \$1,735,700 14%               | \$4,559,800 38%       | \$6,916,700 49%     | \$8,563,200 45%      |
| Other Funding (Incl. Fees)                             | \$8,428,300 66% <sup>22</sup> | \$4,044,400 33%       | \$863,500 6%        | \$7,320,600 39%      |
| <b>Total Program</b>                                   | <b>\$12,796,500</b>           | <b>\$12,097,800</b>   | <b>\$14,183,700</b> | <b>\$18,873,200</b>  |

The fees charged under each of these scenarios are as follows:

| Application Scenario: c. Minor project with NSPS & NESHAP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Application Scenario: d. Synthetic Minor          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------|----------|----------------------------------------|----------|-------------------------|----------|---------|----------|---------------------|------|--------|--------|---------------------------------------------------|-----------|---------------------|----------|-------------------|----------|-----------------|------------|----------|--------------|-------|---------------|---------|-----------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|----------|----------------------------------------|----------|-------------------------|----------|---------|----------|---------------------|------|--------|--------|---------------------------------------------------|-----------|----------|----------|-------------------|----------|---------|------------|----------|--------------|----------------------------|---------------|----------|-----------|----------|
| <p>A new facility not subject to Title V or PSD with three emission points, involving one NSPS and one NESHAP demonstration.</p> <table border="1"> <tr><td>Alabama</td><td>\$11,715</td></tr> <tr><td>Arkansas</td><td>\$22.97 per ton of allowable emissions</td></tr> <tr><td>Colorado</td><td>\$152.90 + \$76.45/hour</td></tr> <tr><td>Delaware</td><td>\$1,140</td></tr> <tr><td>Illinois</td><td>\$1,300 - \$11,000</td></tr> <tr><td>Iowa</td><td>No fee</td></tr> <tr><td>Kansas</td><td>\$1,500 + 0.05% of the capital cost (\$4,000 max)</td></tr> <tr><td>Minnesota</td><td>\$19,090</td></tr> <tr><td>Missouri</td><td>\$100 + \$50/hour</td></tr> <tr><td>Nebraska</td><td>\$250 - \$1,500</td></tr> <tr><td>New Mexico</td><td>\$11,670</td></tr> <tr><td>South Dakota</td><td>\$125</td></tr> <tr><td>West Virginia</td><td>\$4,500</td></tr> <tr><td>Wisconsin</td><td>\$12,400</td></tr> </table>                                     | Alabama                                           | \$11,715 | Arkansas | \$22.97 per ton of allowable emissions | Colorado | \$152.90 + \$76.45/hour | Delaware | \$1,140 | Illinois | \$1,300 - \$11,000  | Iowa | No fee | Kansas | \$1,500 + 0.05% of the capital cost (\$4,000 max) | Minnesota | \$19,090            | Missouri | \$100 + \$50/hour | Nebraska | \$250 - \$1,500 | New Mexico | \$11,670 | South Dakota | \$125 | West Virginia | \$4,500 | Wisconsin | \$12,400 | <p>An existing facility subject to Title V and PSD with three emission points that require limits on three pollutants to avoid Title V and/or PSD (synthetic minor).</p> <table border="1"> <tr><td>Alabama</td><td>\$7,110</td></tr> <tr><td>Arkansas</td><td>\$22.97 per ton of allowable emissions</td></tr> <tr><td>Colorado</td><td>\$152.90 + \$76.45/hour</td></tr> <tr><td>Delaware</td><td>\$1,140</td></tr> <tr><td>Illinois</td><td>\$8,000 - \$10,000</td></tr> <tr><td>Iowa</td><td>No fee</td></tr> <tr><td>Kansas</td><td>\$1,500 + 0.05% of the capital cost (\$4,000 max)</td></tr> <tr><td>Minnesota</td><td>\$12,825</td></tr> <tr><td>Missouri</td><td>\$100 + \$50/hour</td></tr> <tr><td>Nebraska</td><td>\$1,300</td></tr> <tr><td>New Mexico</td><td>\$1,945</td></tr> <tr><td>South Dakota</td><td>\$125 + \$1,000 if ethanol</td></tr> <tr><td>West Virginia</td><td>\$1,000</td></tr> <tr><td>Wisconsin</td><td>\$19,400</td></tr> </table> | Alabama | \$7,110  | Arkansas | \$22.97 per ton of allowable emissions | Colorado | \$152.90 + \$76.45/hour | Delaware | \$1,140 | Illinois | \$8,000 - \$10,000  | Iowa | No fee | Kansas | \$1,500 + 0.05% of the capital cost (\$4,000 max) | Minnesota | \$12,825 | Missouri | \$100 + \$50/hour | Nebraska | \$1,300 | New Mexico | \$1,945  | South Dakota | \$125 + \$1,000 if ethanol | West Virginia | \$1,000  | Wisconsin | \$19,400 |
| Alabama                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | \$11,715                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Arkansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$22.97 per ton of allowable emissions            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Colorado                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$152.90 + \$76.45/hour                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Delaware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$1,140                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Illinois                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$1,300 - \$11,000                                |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Iowa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No fee                                            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Kansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | \$1,500 + 0.05% of the capital cost (\$4,000 max) |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Minnesota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$19,090                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Missouri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$100 + \$50/hour                                 |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Nebraska                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$250 - \$1,500                                   |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| New Mexico                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$11,670                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| South Dakota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | \$125                                             |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| West Virginia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | \$4,500                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Wisconsin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$12,400                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Alabama                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | \$7,110                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Arkansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$22.97 per ton of allowable emissions            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Colorado                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$152.90 + \$76.45/hour                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Delaware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$1,140                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Illinois                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$8,000 - \$10,000                                |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Iowa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No fee                                            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Kansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | \$1,500 + 0.05% of the capital cost (\$4,000 max) |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Minnesota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$12,825                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Missouri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$100 + \$50/hour                                 |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Nebraska                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$1,300                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| New Mexico                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$1,945                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| South Dakota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | \$125 + \$1,000 if ethanol                        |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| West Virginia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | \$1,000                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Wisconsin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$19,400                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Application Scenario: e. Existing PSD Modification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Application Scenario: f. New EGU                  |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| <p>An existing PSD major facility with a PSD major modification for three pollutants involving three emission points all subject to one NSPS and one NESHAP.</p> <table border="1"> <tr><td>Alabama</td><td>\$31,060</td></tr> <tr><td>Arkansas</td><td>\$22.97 per ton of allowable emissions</td></tr> <tr><td>Colorado</td><td>\$152.90 + \$76.45/hour</td></tr> <tr><td>Delaware</td><td>\$1,030</td></tr> <tr><td>Illinois</td><td>\$12,000 - \$16,000</td></tr> <tr><td>Iowa</td><td>No fee</td></tr> <tr><td>Kansas</td><td>\$1,500 + 0.05% of the capital cost (\$4,000 max)</td></tr> <tr><td>Minnesota</td><td>\$12,825 - \$29,925</td></tr> <tr><td>Missouri</td><td>\$100 + \$50/hour</td></tr> <tr><td>Nebraska</td><td>\$3,000</td></tr> <tr><td>New Mexico</td><td>\$40,735</td></tr> <tr><td>South Dakota</td><td>\$125</td></tr> <tr><td>West Virginia</td><td>\$7,500</td></tr> <tr><td>Wisconsin</td><td>\$44,400</td></tr> </table> | Alabama                                           | \$31,060 | Arkansas | \$22.97 per ton of allowable emissions | Colorado | \$152.90 + \$76.45/hour | Delaware | \$1,030 | Illinois | \$12,000 - \$16,000 | Iowa | No fee | Kansas | \$1,500 + 0.05% of the capital cost (\$4,000 max) | Minnesota | \$12,825 - \$29,925 | Missouri | \$100 + \$50/hour | Nebraska | \$3,000         | New Mexico | \$40,735 | South Dakota | \$125 | West Virginia | \$7,500 | Wisconsin | \$44,400 | <p>A new PSD major facility that is an electrical generating unit (EGU).</p> <table border="1"> <tr><td>Alabama</td><td>\$20,480</td></tr> <tr><td>Arkansas</td><td>\$22.97 per ton of allowable emissions</td></tr> <tr><td>Colorado</td><td>\$152.90 + \$76.45/hour</td></tr> <tr><td>Delaware</td><td>\$1,455</td></tr> <tr><td>Illinois</td><td>\$12,000 - \$16,000</td></tr> <tr><td>Iowa</td><td>No fee</td></tr> <tr><td>Kansas</td><td>\$1,500 + 0.05% of the capital cost (\$4,000 max)</td></tr> <tr><td>Minnesota</td><td>\$29,925</td></tr> <tr><td>Missouri</td><td>\$100 + \$50/hour</td></tr> <tr><td>Nebraska</td><td>\$3,000</td></tr> <tr><td>New Mexico</td><td>\$40,735</td></tr> <tr><td>South Dakota</td><td>\$125</td></tr> <tr><td>West Virginia</td><td>\$18,500</td></tr> <tr><td>Wisconsin</td><td>\$64,000</td></tr> </table>                                                                                                              | Alabama | \$20,480 | Arkansas | \$22.97 per ton of allowable emissions | Colorado | \$152.90 + \$76.45/hour | Delaware | \$1,455 | Illinois | \$12,000 - \$16,000 | Iowa | No fee | Kansas | \$1,500 + 0.05% of the capital cost (\$4,000 max) | Minnesota | \$29,925 | Missouri | \$100 + \$50/hour | Nebraska | \$3,000 | New Mexico | \$40,735 | South Dakota | \$125                      | West Virginia | \$18,500 | Wisconsin | \$64,000 |
| Alabama                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | \$31,060                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Arkansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$22.97 per ton of allowable emissions            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Colorado                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$152.90 + \$76.45/hour                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Delaware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$1,030                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Illinois                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$12,000 - \$16,000                               |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Iowa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No fee                                            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Kansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | \$1,500 + 0.05% of the capital cost (\$4,000 max) |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Minnesota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$12,825 - \$29,925                               |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Missouri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$100 + \$50/hour                                 |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Nebraska                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$3,000                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| New Mexico                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$40,735                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| South Dakota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | \$125                                             |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| West Virginia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | \$7,500                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Wisconsin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$44,400                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Alabama                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | \$20,480                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Arkansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$22.97 per ton of allowable emissions            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Colorado                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$152.90 + \$76.45/hour                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Delaware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$1,455                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Illinois                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$12,000 - \$16,000                               |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Iowa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No fee                                            |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Kansas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | \$1,500 + 0.05% of the capital cost (\$4,000 max) |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Minnesota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$29,925                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Missouri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$100 + \$50/hour                                 |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Nebraska                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \$3,000                                           |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| New Mexico                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$40,735                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| South Dakota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | \$125                                             |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| West Virginia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | \$18,500                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |
| Wisconsin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | \$64,000                                          |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |                     |          |                   |          |                 |            |          |              |       |               |         |           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |          |                                        |          |                         |          |         |          |                     |      |        |        |                                                   |           |          |          |                   |          |         |            |          |              |                            |               |          |           |          |

<sup>18</sup> Comparative data was reviewed by the DNR's Budget & Finance Bureau.

<sup>19</sup> Transactional summaries provided by the Air Quality Bureau using FY 2012 data provided by Land and Water Quality Bureaus.

<sup>20</sup> The allocation of the funds between Bureaus is determined by legislation, and not subject to change by the DNR.

<sup>21</sup> Typically, this contribution is \$103,000. The value in FY 2015 is inflated because it includes a one-time special appropriation of \$1.4 million and SWAP money for asbestos inspections.

<sup>22</sup> This contribution percentage is an anomaly, due to a shortage of fees generated in this particular fiscal year. The historical average is 75%.

**Comparing Bureau Fee Structures**

Fees charged by the DNR tend to fall into three categories:

- a. Fees are charged for the right to exercise a privilege. Individuals interested in hunting, fishing, camping or operating a boat dock pay license fees. State-certified environmental laboratories, those seeking a permit to withdraw or divert water, and those seeking to construct confined feeding operations also pay fees for the opportunity to engage in a particular activity. This practice is in alignment with state air programs that charge annual fees and source registration fees, or those that scale fees based on the allowable limit contained in the permit.
- b. Fees are charged for a service. The DNR provides fish to stock farm ponds and seedlings from the state forest nursery. They administer certification exams for operators of wastewater treatment systems and certify environmental laboratories for operation. This practice aligns with state air programs that link fees to specific actions taken by the agency such as ambient air monitoring, emissions modeling, data review, application review or permit preparation, all of which have specific and traceable costs.
- c. Fees are charged for impacts to the environment. Landfill tonnage fee (pay-as-you-throw) structures create financial incentives for environmentally-friendly behavior. This is aligned with the existing Title V fees that are calculated using actual reported emissions rather than allowable limits.

The Water Quality Bureau charges a wide variety of fees to generate revenue. These are some examples:

| Fee Type                                                                                                                                      | Fee                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Annual fees for NPDES permits, major industrial / minor industrial discharge                                                                  | \$3,400 / \$300 per year                  |
| Annual NPDES operating permit (no discharge to waters of US)                                                                                  | \$170 per year                            |
| Annual fee for active public water supply – capped at \$350,000                                                                               | \$0.12 / person in population             |
| Individual NPDES permit fee                                                                                                                   | \$1,250 every 5 years                     |
| File a Notice of Intent for NPDES Coverage under General Permit for Storm Water Discharges Associated with Industrial Activity & Construction | 1 yr: \$175<br>3 yr: \$350<br>5 yr: \$700 |
| Apply for permit to withdraw or divert water                                                                                                  | \$350                                     |
| Apply for a permit to store water                                                                                                             | \$75                                      |
| Register a minor non-recurring use of water                                                                                                   | \$75                                      |

| Fee Type                                                                                                                                                                           | Fee                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Renew or modify an existing water use permit                                                                                                                                       | \$0                           |
| Inspector certification fee                                                                                                                                                        | \$75 - \$300                  |
| Certified inspector renewal fee                                                                                                                                                    | \$300 every 2 yrs             |
| Operators certificate renewal fee                                                                                                                                                  | \$60                          |
| Construct a public water main. Additional fees can be charged for cost of construction (\$100+), requesting time extensions (\$50), Filing change orders (\$50+), plus annual fees | \$100 per foot up to 1,000 ft |
| First-time submittal of a manure management plan (MMP)                                                                                                                             | \$250 plus indemnity fee      |
| Construction permit to build a new confinement or expand a facility                                                                                                                | \$250                         |
| Manure Management Annual Fee                                                                                                                                                       | \$0.15 per animal             |

In addition the Water Bureau administers five licensing and certification programs, each with specific fee schedules. They are:

- Water / Wastewater Operator Certification
- Environmental Laboratory Certification
- Well Contractor Certification
- Time of Transfer Inspector Certification and
- Commercial Septic Tank Cleaner License

| Program & Fees                                           | Fee                                   |
|----------------------------------------------------------|---------------------------------------|
| Water / Wastewater Operator Certification                |                                       |
| • Exam fee                                               | \$30                                  |
| • Certification Fee                                      | 2 yr: \$80                            |
| • Renew a certification                                  | \$60                                  |
| • Duplicate documentation                                | \$20                                  |
| Laboratory Certification                                 |                                       |
| • Certification Application – based on services provided | \$400 - \$12,900 dependent on service |
| • Administration fee                                     |                                       |
| • Additional on-site visits routine                      | \$300                                 |
| • On-site visit for deficiencies                         | \$500                                 |

| Program & Fees                               | Fee                                                              |
|----------------------------------------------|------------------------------------------------------------------|
| Well Contractor                              |                                                                  |
| • Exam Application                           | \$100                                                            |
| Time of Transfer                             |                                                                  |
| • Training                                   | \$300                                                            |
| • Exam fee                                   | \$50                                                             |
| • Certification fee                          | \$300                                                            |
| Septic Tank Cleaner                          |                                                                  |
| • License fee                                | \$150 per year for 1 vehicle, + \$50 for each additional vehicle |
| • Land application fee                       | \$7 per 1,000 gal                                                |
| • First-time applicants for land application | \$300                                                            |

The fee structure of the Land Quality Bureau includes the following fees:

| Program & Fees                                                                    | Fee                                                |
|-----------------------------------------------------------------------------------|----------------------------------------------------|
| Annual fee for businesses or persons processing tires                             | \$850                                              |
| Tonnage fees for landfill disposal                                                | \$4.25 / ton variable                              |
| Annual fee for generators of hazardous waste                                      | \$25 for small, \$250 for large, plus tonnage fees |
| DNR oversight expenses charged bi-annually to land recycling program participants | Up to \$7,500 per participant                      |

### 3. Observations & Principles for Decision-Making

Although the survey sent by the Bureau identified the fee structure characteristics of several states, very little information was available regarding the performance, or effectiveness, of each structure. Most programs were not clear about the relationship between revenue and actual cost. Many states indicated the use of highly centralized financial processes, and so had little knowledge of how much revenue they collected or whether it covered the cost of administering their air program. Several programs were in flux at the moment of the survey. Many were attempting to redesign their fee structures to pay for present cost and provide resources for the future.

It is also difficult to collect comparative data of state budgets for air pollution control programs since this information is very labor intensive to collect. A report prepared in 2004 by the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO) compared the air pollution control budgets of 27 states and placed Iowa in the bottom third when ranked by budget size<sup>23</sup>. The National Association of Clean Air Agencies<sup>24</sup> (NACAA) studied state air programs (2009) from 30 states, and found "state and local air agencies provide 77 percent of their budgets (not including permit fees under the federal Title V program), while federal grants constitute only 23 percent<sup>25</sup>." Data in both studies indicate that the relative contribution of funding made by the State to the Bureau is on the low side compared to other states.

It appears that any successful strategy for financial sustainability will require new fees and a larger contribution from the State. But existing fees (or lack of fees), and the policies by which they are administered, have generated certain expectations among the citizens and businesses of the state. The Stakeholder's group believes that fees for the Bureau should take into account these precedents and patterns, and fit the way Iowans do business. Fees should be easy to understand, simple to pay, equitably distributed and stable over time. Iowa is not a state where intricate calculation tools will be appreciated.

<sup>23</sup> "Funding Needs of State and Local Air Pollution Control Agencies," STAPPA & ALAPCO, June 2002, p. 17.

<sup>24</sup> NACAA is conducting a Title V survey and is expected to release new data in early 2015.

<sup>25</sup> "Investing in Clean Air and Public Health: A Needs Survey of State and Local Air Pollution Control Agencies", April 27, 2009, Nat'l Association of Clean Air Agencies (NACAA), p. 7.

### Principles for Decision-Making

Stakeholders agreed that regardless of the strategy adopted, decisions regarding fees should follow certain general principles:

1. The Bureau should have a funding structure that provides a sustainable future as regulations change.
2. Funding solutions should be fair to stakeholders, transparent and easily understood.
3. Fees levied by the Bureau should be deposited into a dedicated fund. Unspent funds should carry forward into the next fiscal year to provide resources for future requirements.
4. In cases where the cost of a service is directly traceable to users or beneficiaries of air quality services, those users or beneficiaries should pay part of the cost through fees.
5. The Title V permit program should continue to be self-sustaining through the payment of fees by Title V permit holders. The process for setting the amount of the annual Title V emissions tonnage fee should continue to include budgetary review and consultation with stakeholders.
6. The cost of programs and services provided by the Bureau for the benefit of Iowans as a whole should be paid by the state. This will require increased support from the state. This may include costs associated with<sup>26</sup>:
  - a. Source oriented monitors
  - b. Ambient Monitoring – PSD Background & Transport
  - c. Field inspections for minor sources
  - d. Compliance assistance and enforcement for minor sources
  - e. Legal Services for minor sources
  - f. Management, secretarial & data support for minor source programs
  - g. Ambient monitoring for population areas
7. Costs for Core Programs and services benefiting both individual sources and the general public should be supported by revenue from the Title V program and state funding. This will require increased support from the state. This includes costs outlined in the “Core Programs” associated with:
  - a. Emissions Inventory Questionnaire
  - b. Rules, Budget Contracts
  - c. AQB/UNI/Small Business Assistance
  - d. SIP activities
  - e. Legal service activities
  - f. Management, Secretarial & Data Support
8. New funding sources should be investigated and pursued where possible. This includes potential revenue derived from mobile sources and tire recycling.
9. The Bureau should continue its efforts to remove permit backlogs, increase process efficiency and improve the customer experience.
10. Permit processes should accommodate requests for “expedited” application processing for an additional fee.

<sup>26</sup> The following list is composed of labels taken from the specific cost lines in the Air Quality Budget. See Section B of this report for a copy of that budget.

## F. Moving Toward Financial Sustainability

### 1. Strategy Overview

The Bureau leads the public in protecting the air we breathe by partnering with communities, business and industry, organizations and private citizens. These partners, represented by the stakeholders on this team, have worked diligently to develop a strategy for approaching and managing the financial sustainability of the Bureau for years to come. Amid increasing regulation and concern for public health, costs are expected to rise and revenue shortfalls will remain a common theme until the funding structure is diversified and the Bureau becomes financially sustainable.



The strategy recommended in this report to achieve financial sustainability has four pillars. They are to:

- Identify and control costs
- Diversify the income structure
- Ensure sufficient and sustainable public funding, and
- Adjust Budgeting Practices

**Recommendation 1:** *The Air Quality Bureau should have a fully developed, sustainable funding mechanism in place by the end of fiscal year 2019. Implementation of this recommendation would require increasing the Bureau budget from the current \$12.8 million to roughly \$14.0 million, not including expenditures for three new EPA requirements discussed in this report (SO<sub>2</sub> and Ozone NAAQS, and SPARS).*

#### Identify and Control Costs

As discussed in Section C of this report, the Bureau has analyzed program needs to identify current and future costs through 2019. Cost control measures have been implemented throughout the Bureau with projected savings of \$2.4 million annually. Routine costs are scheduled and tracked. Some new programs are predictable and can be included in budget planning at this time. This includes the addition of asbestos inspectors and implementation of the carbon standard under 111(d). Others, however, contain optional or unquantifiable cost lines subject to change as US EPA finalizes rules and standards. The initiatives that contain significant unpredictable costs as of the writing of this report are:

| Topic                                                       | Area of Uncertainty                                                                                                                                   | Approximate Cost Range          |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| SO2 Data Requirements Rule                                  | Attainment status determinations and boundary delineation using dispersion modeling.                                                                  | \$500,000                       |
|                                                             | Attainment status determined using monitoring (assumes facility pays for costs of installing and operating monitor).                                  | \$0 - \$560,000                 |
| Revised Ozone National Ambient Air Quality (NAAQS) standard | Attainment status determination may be hindered by old monitors subject to error. Replacement may be advisable depending on level of new ozone NAAQS. | \$0 - \$590,000                 |
|                                                             | Determining nonattainment boundaries and developing nonattainment State Implementation Plans (SIPs).                                                  | \$0 - \$7 million <sup>27</sup> |
| SPARS – The State Permitting and Air Reporting System       | Various options for revision or replacement of system. Replacement system is under study.                                                             | \$0 - \$2 million               |

**Recommendation 2:** The Stakeholders group recommends continued tracking of Bureau costs and encourages initiatives to provide services efficiently and seamlessly. Projects with highly variable costs (SO<sub>2</sub> and Ozone NAAQS, SPARS) should be authorized when program requirements and needs become clearer. Funding should be provided either from the General Fund, or by special appropriation as a one-time program expense (as is done for the Water Quality Bureau), since these programs are required by law for the benefit and protection of Iowa's citizens.

### Diversify the Income Structure

Many believe, mistakenly, that the emissions fee program under Title V of the Clean Air Act is the answer to the Bureaus' financial problems. Why can't the Bureau raise the current fee and solve the problem? First, Title V emission fees are only paid by Title V permit holders, and the revenues can only support the Title V operating permit program. Federal law states, "Any fee required to be collected ... under this subsection shall be utilized solely to cover all reasonable (direct and indirect) costs required to support the permit program..."<sup>28</sup> Second, revenue is decreasing due to reductions in emissions, and reliance on a diminishing fee base creates significant risk to financial stability. The Title V fee program, while essential, will not solve the funding shortfall. The state needs additional revenue sources to move the Bureau toward a sustainable funding mechanism.

<sup>27</sup> If the standard is set at 69 or 70 parts per billion (ppb), the State of Iowa will be in attainment based on current monitoring values. If the level is set at 60 to 63 ppb, then all monitoring locations would be nonattainment based on current data. The Bureau estimates \$7 million would be necessary to determine nonattainment boundaries and develop nonattainment SIPs.

<sup>28</sup> Clean Air Act, 42 U.S.C. Sec 7661a (b)(3)(C).

**Recommendation 3:** The Stakeholders group recommends the Bureau charge fees for service. The Asbestos NESHAP should charge a notification fee. The cost of application review, permit issuance and associated modeling related to air construction permitting for major and minor sources should also incur a fee for service. The Stakeholders group recommends the Bureau charge fees to cover the cost of application review and permit issuance for Title V operating permits. Title V emissions fees should continue and be administered as they are today. The fee schedule for the major / PSD / Title V sources would be established by a group of major source stakeholders. Fees for minor source permit issuance and modeling costs would be determined by a minor source stakeholder group, and paid proportionally, with a target of 40% of cost paid by the sources and 60% of cost paid by the state. Both stakeholder groups would meet annually to evaluate their fee structures as is currently done for the Title V emission fee. Redistribution of costs in this way would create a sustainable revenue stream for the Title V program which will offset the projected decreases in chargeable emissions. Implementation of fee structures would collect roughly \$2.6 million annually from major / PSD / Title V sources, roughly \$250,000 annually from minor sources, and asbestos fees of \$300,000 to \$400,000.

Tiered structures that acknowledge the varying resources required for "complex," "standard," and "template" permit applications are appropriate and can be approved by the stakeholders as needed. This Stakeholders group favors fee structures that are limited in complexity and administrative burden.

### Ensure Sources of Sufficient and Sustainable Public Funding

As discussed, Federal grants have provided a helpful and stable source of revenue to the Bureau, and we expect that source of revenue to remain. Grants have, however, lost purchasing power over time, and there is a trend toward issuing future grants through programs that require more state matching. These factors, combined with Bureau cost projections, imply that increased State contributions will be required if the Bureau is to become financially sustainable.

Increasing the State's contribution to the budget of the Air Quality Bureau can be justified in a number of ways:

- The citizens of the State are the primary beneficiaries of many services provided by the Bureau. This includes complaint response, ambient air monitoring, asbestos inspections, and small business assistance. The annual cost of operations and programs required for the state as a whole has significantly exceeded the annual state contribution.
- Statistics in the 2011 National Emissions Inventory indicate that major sources in Iowa are responsible for 11% of total emissions to ambient air in the State<sup>29</sup> but routinely pay for 75% of the Bureau's total program costs.
- Benchmarking indicates the need for better alignment:
  - Historical data indicates the total size of the Air Quality budget tends to be in the bottom third compared to other states.<sup>30</sup>

<sup>29</sup> 2011 National Emissions Inventory, SCC Data file for Point, Nonpoint, and Non-road and On-road data categories

<sup>30</sup> "The Critical Funding Shortfall of State and Local Air Quality Agencies," STAPPA / ALAPCO, February 2004, p. 26

- o The size of the State contribution is low compared to other states. An NACAA study in 2009 surveyed 35 states and found “state and local air agencies provide 77 percent of their budgets (not including permit fees under the federal Title V program), while federal grants constitute only 23 percent.”<sup>31</sup> In Iowa, the contribution from the General Fund is 6-8% annually. The cumulative disbursement from the General Fund, Environment First Fund and Groundwater Fund together was less than 10% of budget in FY 15.
- o Within the DNR, the Field Services, Land Quality and Water Quality Bureaus in FY 2015 received 10-15% more funding (\$1 – 2 million) from the Environment First & Infrastructure Fund.<sup>32</sup>
- Capturing all increases in costs through fees will be burdensome to businesses in the state, making Iowa less competitive in attracting and keeping jobs.
- Businesses that pay fees also pay taxes and in other ways contribute funding to the General Fund.

**Recommendation 4:** The Stakeholder group recommends increasing state funding levels from the General Fund for programs whose primary beneficiaries are citizens of the state. Redistribution of costs in this way would require increasing the state contribution to the budget from \$2.5 million contributed in FY 2015 to roughly \$3.2 million in subsequent years, not including cost items related to new EPA requirements related to SO<sub>2</sub> and Ozone NAAQS, and SPARS.

**Adjust Budgeting Practices**

Successful implementation of these strategies requires some adjustment in the Bureau’s current accounting practices.

**Recommendation 5:** The Stakeholder group recommends creation of a dedicated fund for deposits related to new user fees. Proposed wording is provided in Appendix ii. Moneys deposited into the new fund should be retained for the purposes of administering associated programs, and shall be allowed to accrue to fund future programs.

**Recommendation 6:** The Stakeholders group recommends reassignment of certain cost lines within the Bureau of Air Quality budget to funding sources that are more equitable and appropriate. Those reassignments are provided in the following table<sup>33</sup>:

| Cost Item                                      | Prior source of funding | Proposed source of funding      | Approximate dollar value |
|------------------------------------------------|-------------------------|---------------------------------|--------------------------|
| Title V Application review and Permit Issuance | Title V emission fees   | Title V permit application fees | \$1.1 million            |
| Major source application review,               | Title V                 | Major source permit             | \$1.1 million            |

<sup>31</sup> “Investing in Clean Air and Public Health,” National Association of Clean Air Agencies, April 27, 2009, Executive Summary.  
<sup>32</sup> Data from section E of this report, confirmed by the agency accounting office.  
<sup>33</sup> Cost line descriptions and approximate dollar values are based on tables provided by the Bureau during Stakeholder work sessions, October 2014.

| Cost Item                                                          | Prior source of funding | Proposed source of funding                   | Approximate dollar value |
|--------------------------------------------------------------------|-------------------------|----------------------------------------------|--------------------------|
| modeling and permit issuance                                       | emission fees           | issuance fees                                |                          |
| Source oriented monitors                                           | Title V emission fees   | General Fund                                 | \$455,000                |
| PSD Application review, modeling and permit issuance               | Title V emission fees   | PSD permit issuance fees                     | \$340,000                |
| Ambient monitoring – PSD background levels and transport           | Title V emission fees   | General Fund                                 | \$360,000                |
| Application review, modeling and permit issuance for minor sources | General Fund            | Minor source fees (40%) & General Fund (60%) | \$570,000                |
| Asbestos inspections                                               | SWAP                    | Inspection fee for users                     | \$130,000                |
| Ambient monitoring – population centers                            | Title V emission fees   | General Fund                                 | \$1.4 million            |
| Title V backlog response                                           | Previously unfunded     | Title V emissions fees                       | \$120,000                |

Good accounting practices will also require an account for revenue generated as a result of recommendation #2.

**2. Funding Proposal**

Implementation of the recommendations provided in this report will generate additional operating revenue for the Bureau and reallocate specific costs to the system users responsible for those costs. The resulting model is more equitable and financially sustainable than the current approach:

| Cost Allocation Summaries:                     | 2,016      | 2,017      | 2,018      | 2,019      |
|------------------------------------------------|------------|------------|------------|------------|
| -Title V Emission Fees                         | 8,029,200  | 5,686,400  | 5,799,000  | 5,913,800  |
| -Title V Operating Permit Issuance Fees        | -          | 1,201,600  | 1,222,200  | 1,243,100  |
| -Major Source Permit Issuance Fees             | -          | 1,418,600  | 1,445,600  | 1,473,100  |
| -Minor Source Permit Issuance Fees             | -          | 231,600    | 236,000    | 240,500    |
| -Asbestos Fees                                 | 111,800    | 130,000    | 132,500    | 135,000    |
| -General Fund/Environment First/Federal Grants | 4,880,400  | 4,736,700  | 4,822,000  | 4,908,900  |
| Total:                                         | 13,021,400 | 13,404,900 | 13,657,300 | 13,914,400 |

The costs subject to reallocation, if paid as indicated, would generate revenue of \$13.0 to \$13.9 million annually. These revenue levels would cover the IDNR projected programmatic costs for fiscal years 2016 through 2019, excluding additional costs currently undefined for new EPA requirements related to SO<sub>2</sub> and Ozone NAAQS, and SPARS. Due to the time lag associated with the need to pass regulation for collecting fees and setting the fee structures, revenue from user fees for Title V operating permits, Major & Minor Source air construction permits and Asbestos fees would not commence until fiscal year 2017.

The revenue from Title V emission fees would continue to be calculated using the existing cap of \$56 per ton. Based on the projected level of billable emissions by the IDNR, projected declines in Title V emission revenues would be replaced by Title V user fees in fiscal years 2016, 2018 and 2019. There is also a projected shortfall of revenues for the Asbestos program in 2017 that would need to be addressed. The largest projected shortfall in revenue is from the category of General and Federal Funds and requires additional funding of approximately \$2.0 million annually, which should be paid by the state as programmatic costs for the state, not including additional costs currently undefined for new EPA requirements related to SO<sub>2</sub> and Ozone NAAQS, and SPARS.

|                                                       |                   |                   |                   |                   |
|-------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Shortfalls:</b>                                    | <b>-2,743,900</b> | <b>-1,511,800</b> | <b>-2,495,600</b> | <b>-2,696,300</b> |
| -Title V Emission Fees                                | -681,000          | 373,000           | -525,500          | -639,300          |
| -Title V Operating Permit Issuance Fees               | 0                 | 0                 | 0                 | 0                 |
| -Major Source Permit Issuance Fees                    | 0                 | 0                 | 0                 | 0                 |
| -Minor Source Permit Issuance Fees                    | 0                 | 0                 | 0                 | 0                 |
| -Asbestos Fees (SWAP for 2016)                        | -34,400           | 0                 | 0                 | 0                 |
| <b>-General Fund/Environment First/Federal Grants</b> | <b>-2,028,500</b> | <b>-1,884,800</b> | <b>-1,970,100</b> | <b>-2,057,000</b> |

The Stakeholder Group understands there are other options, and many have been discussed at length. However, charged with the need to establish a funding mechanism that is responsive to legal requirements, fair to the citizens and businesses of the state, and financially sustainable, this appears to be the best path forward. A complete spreadsheet showing the proposed budget cost allocation is provided in Appendix iii.

The Stakeholders Group appreciates the opportunity to participate in this decision-making process, and looks forward to further partnership and dialogue in the future.

## Appendix i: Signature Endorsements

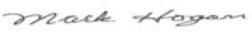
## Signature Endorsements

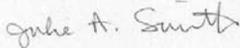
### Summary

Eighteen of the 30 organizations that participated in the workgroup support all of the recommendations included in this report. It is anticipated at this time that Archer Daniel Midland (ADM) will also be supporting all of the recommendations in this report. Six organizations cannot support all of the recommendations included in this report. Five organizations provided no endorsements.

### Endorsements in support

We the undersigned have participated in the Air Quality Stakeholder Group and support all of the recommendations included in this report.

| <u>Name</u>        | <u>Organization</u>                                | <u>Signature</u>                                                                    |
|--------------------|----------------------------------------------------|-------------------------------------------------------------------------------------|
| Kelly P. Jorgensen | AGP                                                |    |
| John Mitchell      | ALCOA - Davenport Works                            |    |
| Chuck Hallier      | Cargill Corn Milling North America                 |    |
| Rex Butler         | Central Iowa Power Cooperative                     | Rex Butler                                                                          |
| Mike Maas          | CF Industries                                      |    |
| Laurie Zelnio      | Deere & Company                                    |   |
| Mark Hogan         | Environmental Management Services<br>of Iowa, Inc. |  |
| Mick Durham        | Grain Processing Corporation                       |  |
| Scott Blankman     | Interstate Power and Light Company                 |  |
| Mark Landa         | Iowa Association of Electric Cooperatives          | Mark Landa                                                                          |

|                      |                                                              |                                                                                     |
|----------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Julie Smith          | Iowa Association of Municipal Utilities                      |  |
| Brian Hanft          | Iowa Environmental Health Association                        |  |
| Lindsey Wanderscheid | Iowa State University                                        |  |
| Jim Hodina           | Linn County Public Health                                    |  |
| A. John Davis        | MidAmerican Energy Company                                   |  |
| Joe McGuire          | Oldcastle Materials Group                                    |  |
| John Maynes          | Petroleum Marketers and<br>Convenience Stores of Iowa (PMCI) |  |
| Jeremy Becker        | Polk County Public Works Department                          |  |

**Cannot support all of the recommendations**

We the undersigned have participated in the Air Quality Stakeholder Group but at this time cannot support all of the recommendations included in this report.

| <u>Name</u>     | <u>Organization</u>                     | <u>Signature</u>                                                                  |
|-----------------|-----------------------------------------|-----------------------------------------------------------------------------------|
| William Rosener | Asphalt Paving Association of Iowa      |  |
| Nicole Crain    | Iowa Association of Business & Industry |  |
| John Crotty     | Iowa Environmental Council              |  |
| Rich White      | Iowa Limestone Producers Association    |  |
| T.J. Page       | Iowa Renewable Fuels Association        |  |
| Mona Bond       | Manatts, Inc.                           |  |

**No endorsements**

- Climax Molybdenum Company
- Iowa Institute for Cooperatives
- National Federation of Independent Businesses
- Poet Biorefining-Coon Rapids
- Sac and Fox Tribe of the Mississippi in Iowa

**From:** [Mitchell, John N.](#)  
**To:** [McGraw, Jim \[DNR\]](#)  
**Subject:** RE: AQ Stakeholder Group Report for signatures  
**Date:** Monday, November 24, 2014 2:58:27 PM

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Hello Jim,

Alcoa supports the recommendations included in the attached report.

Alcoa also supports and encourages future efforts by the IDNR to stream line the Construction Permit and Title V Operating Permit processes to reduce the resource requirements for both the IDNR and regulated industry.

Thank you for the opportunity to participate in the AQ Stakeholder group.

**John Mitchell**  
**ALCOA - Davenport Works**  
**Phone: (563) 459-2411; 242-2411 (Actnet)**  
**Email: [John.Mitchell@Alcoa.com](mailto:John.Mitchell@Alcoa.com)**

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**From:** McGraw, Jim [DNR] [<mailto:jim.mcgraw@dnr.iowa.gov>]  
**Sent:** Thursday, November 20, 2014 9:33 AM  
**To:** McGraw, Jim [DNR]  
**Cc:** darrellhanson2@gmail.com; Fitzsimmons, Catharine [DNR]; Walker, Wendy [DNR]; Ehm, William [DNR]; Tahtinen, Sharon [DNR]; Gipp, Chuck [DNR]; Hoskins, Laquanda D.  
**Subject:** EXT: AQ Stakeholder Group Report for signatures  
**Importance:** High

Attached is the final AQ Stakeholder Group report.

As discussed at the Nov 13 meeting, please review the report with your organization. Send me an email indicating whether your organization supports the recommendations included in this report or your organization cannot support all of the recommendations included in this report. Please send me your electronic signature with your email reply. I will affix your electronic signatures to a signature page, which will be inserted into Appendix i of the report. If you wish to include written statements regarding your support or non-support for the report recommendations please include them with your email reply. All statements will be forwarded with the report to the legislature.

**Please send me your email replies by 4 pm on Monday, November 24, 2014.** Please contact me if this deadline will be a problem for you.

Next steps: I will be reviewing the report with the Director and other upper management

staff on November 25. **On November 26, time has been scheduled from 9:30-10:30 am in the third floor conference rooms at the Wallace Building for any workgroup members who wish to discuss the report and recommendations with Director Gipp.** A conference line will also be available (866-685-1580, pass code 5152425296). Workgroup members may also email or call (515-281-3388) the Director as desired to discuss the report recommendations.

The report will be submitted to the legislature by December 1. The Director will be discussing the workgroup's recommendations with the Governor's office on December 1 when he is scheduled to overview the DNR's budget for FY16.

Please contact me if you have questions or need additional information.

Thanks everyone,  
Jim

**JIM MCGRAW**, Environmental Program Supervisor



Iowa Department of Natural Resources  
P 515.725.9543 | F 515.725.9501 | [jim.mcgraw@dnr.iowa.gov](mailto:jim.mcgraw@dnr.iowa.gov)  
Air Quality Bureau | 7900 Hickman Rd., Ste. 1 | Windsor Heights, IA 50324  
[www.iowaCleanAir.gov](http://www.iowaCleanAir.gov) | Air Construction Permit Hotline 877.247.4692

[WWW.IOWADNR.GOV](http://WWW.IOWADNR.GOV)



Leading Iowans in Caring for Our Natural Resources.

**From:** [Walker, Wendy \[DNR\]](#)  
**To:** [Bill Rosener](#)  
**Cc:** [McGraw, Jim \[DNR\]](#)  
**Subject:** RE: Air Quality Bureau Report  
**Date:** Monday, December 01, 2014 8:37:12 AM  
**Importance:** High

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Bill,

Thank you for letting us know APAI's position. Would it be possible to send an electronic signature ( a scanned copy of your signature) so we can place it on the appropriate portion of the report?

Thanks again,

Wendy

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**From:** Bill Rosener [mailto:billr@apai.net]  
**Sent:** Monday, December 01, 2014 8:35 AM  
**To:** Walker, Wendy [DNR]  
**Subject:** Air Quality Bureau Report

Dear Wendy,

The APAI will not be a signatory to the report to the governor. The Report recommends that minor sources cover an amount totaling \$250,000.00 and provides no specifics on how those fees will be distributed. The APAI contractor members are willing to pay a fair amount for the services they are provided. However, the time and cost saving templates that were cooperatively developed between the APAI and the IDNR should minimize the cost of a permit for our contractors. The lack of specifics on the fee structure leaves contractors vulnerable to higher fees than we believe are equitable. Therefore, we are willing to sign the proposed document.

I apologize for the delay in my response.

Respectfully

William Rosener  
Executive Vice President  
Asphalt Paving Association of Iowa  
(O) 515-233-0015  
(C) 515-450-0100  
[www.apai.net](http://www.apai.net)



**From:** Durham, Mick [<mailto:mick.durham@grainprocessing.com>]  
**Sent:** Monday, November 24, 2014 4:08 PM  
**To:** McGraw, Jim [DNR]  
**Subject:** Air Quality Bureau Stakeholder Report

Jim:

In general we approve of the stakeholder's report and recommendations. However, the funding proposal on page 52 and 53 as well as that listed in appendix iii still places most of the burden on Title V stakeholders. In FY16, Title V sources pay 61.5 % of the budget. In 2017-2019 it is 42.5% . The Title V program expenditures are only 29% of the Bureau's budget in all of those years. I hope that the specific fees for each area can be re-evaluated when legislative approval occurs to make the Title V fees more equitable with the services being provided.

Mick

Mick Durham  
Director of Environmental Services  
Grain Processing Corporation  
1600 Oregon St.  
Muscatine, IA 52761  
563-264-4569



Guide Continuous Improvement  
Prevent Pollution  
Comply with Environmental Regulations



521 East Locust Street, Suite 220  
Des Moines, Iowa 50309-1939  
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515.244.7856 fax  
[www.iaenvironment.org](http://www.iaenvironment.org)

## Position of the Iowa Environmental Council

### Summary

- The Iowa Environmental Council SUPPORTS recommendations 1, 2, 3, and 5 in Section F.
- The Iowa Environmental Council DOES NOT SUPPORT recommendations 4 and 6 of Section F.

### Explanation

The recommendations put forward in this report would require an annual increase in state funding of approximately two million dollars.<sup>1</sup> This does not include anticipated costs for implementing forthcoming SO<sub>2</sub> and Ozone standards, or for costs associated with updating the online permitting and reporting system (SPARS).<sup>2</sup> The report recommends that these additional anticipated costs should be covered by the general fund or by special one-time appropriations.

This increased need for state funding is due, in large part, to a decision of the stakeholder group that the cost of certain programs that are performed by DNR “for the benefit of Iowans as a whole” should be shifted to the state.<sup>3</sup> The most significant of these costs are those associated with air quality monitoring. This includes source-oriented monitors, ambient monitoring for PSD background levels, and ambient monitoring for population centers.

| Cost item                                              | Current source of funding | Proposed source of funding | Approximate dollar value <sup>4</sup> |
|--------------------------------------------------------|---------------------------|----------------------------|---------------------------------------|
| Source-oriented monitors                               | Title V emission fees     | General Fund               | \$455,000                             |
| Ambient monitoring – PSD background levels & transport | Title V emission fees     | General Fund               | \$360,000                             |
| Ambient monitoring – population centers                | Title V emission fees     | General Fund               | \$1.4 million                         |

The Iowa Environmental Council questions whether these air quality monitoring programs (especially the source-oriented monitoring and the PSD background level monitoring) are truly performed for the benefit of Iowans as a whole. We encourage the legislature to look closely into

<sup>1</sup> Air Quality Bureau Stakeholder Report at pages 52-53.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.* at page IV.

<sup>4</sup> *Id.* at pages 51-52.

the purpose and use of these monitoring programs before agreeing that their costs should be borne by citizens instead of industry.

The Iowa Environmental Council agrees that additional state funding for the DNR Air Quality Bureau is needed. However, we do not agree that user fees should be set so as to cover only those costs directly attributable to the service a user receives. We cannot support a fee-setting structure that would make important air quality programs entirely contingent upon annual or special one-time appropriations from the legislature. We requested that language be added to the report which acknowledged that, in the event of insufficient appropriations from the legislature, user fees may need to be set so as to cover some costs not directly attributable to services received. The stakeholder group declined to include this acknowledgement.

We strongly believe that the policy for setting user fee amounts should retain enough flexibility to ensure that important air quality programs are not entirely contingent on annual or special one-time appropriations. No fee should be capped by administrative rule – including the Title V emissions fee. We believe all fees should be set as part of a collaborative process between DNR, fee payers, and the public, in which all parties are given an opportunity to review DNR's budget and ensure that all costs are reasonable and that efficiencies are being pursued wherever possible.

The Iowa Environmental Council would be happy to discuss our views on this matter. Please do not hesitate to contact us for more information about our perspective on this report or our involvement in the Air Quality Stakeholder Group.

Iowa Environmental Council contact for further information:

John Crotty  
319-325-7278  
Crotty@iaenvironment.org

## Iowa Limestone Producers Association Response Air Quality Bureau Stakeholder Report

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The Iowa Limestone Producers Association (ILPA) has shared the Air Quality Bureau Stakeholder Report with members of its Environmental Committee and Board of Directors.

We uniformly believe the Air Quality Bureau serves an important function. We are also keenly aware that timely processing of the Construction Air Permits needed by our member companies requires sufficient resources for the Bureau. However, we are unable to support the Report because too many variables remain for us to have confidence in the outcome.

1. ILPA members are willing to pay their fair share. The ILPA Environmental Committee voted early in the process to move from the current system to one with fees covering a portion of the Departments administrative costs. It was our expectation the money generated would cover an anticipated \$20,000.00 minor source permitting budget shortfall in 2016.

However, the Report redistributes General Fund and Federal Grant Funding and recommends minor sources be required to cover a revised amount which approaches \$250,000.00. The report provides no specifics as to how that will be broken down on a per-permit or per-project basis. Rather, the Report indicates specifics would be approved later by a group of stakeholders as needed.

Our membership includes many small business owners. All new fees have a negative impact on their profitability. This impact is often disproportionate when compared to larger business operations. It is difficult for small businesses to support an undefined fee that has the potential to increase each year.

2. The Recommendations in the Report are based on new fees being legislatively directed to the Air Quality Bureau rather than to the State General Fund. We would prefer to see that directive in place before agreeing to pay additional fees. Without that directive, new fees can become nothing more than new taxes.
3. The foundation of the report rests on redistribution of costs in a way that would require State appropriations to the Air Quality Bureau budget to rise from \$2.5 Million in FY 2015 to \$3.2 million in subsequent years. ILPA has concerns this may not be a reasonable expectation.

Date: November 24, 2014

From: James Hodina, Linn County Public Health



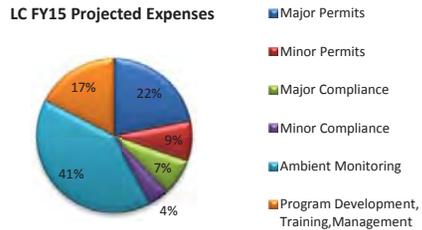
Subject: Air Quality Bureau Stakeholder Report



Presented: Mona Bond, Environmental Director  
11/13/2014

Linn County Public Health was privileged to be a part of the Air Quality Bureau Stakeholder Group. We appreciated the opportunity to better understand the needs, concerns, and priorities of the other members. We were also given the opportunity to ask questions and provide input. As such we give our full support to the recommendations in this report, without reservation.

We would like to take the opportunity to include some additional information regarding how the funding for our local program is allocated for air quality programming. On page 17 of the report, expenses related to permitting and core program activities are shown. Core program expenses include ambient monitoring, compliance assistance, asbestos, emission inventory, and so forth. As a matter of accounting practice, however, the Linn County and Polk County programs are shown as a separate core program expense and are not broken out by activity. This is somewhat misleading as the local program performs many of the same activities as the DNR. These activities are well articulated in an annual contract. The following figures illustrate how the local program compares its level of effort to the Iowa DNR.



Some general observations when comparing the two budgets include:

- About the same amount of effort is put into major source permitting in Linn County as throughout the state (there are 17 major sources in Linn County).
- The local program spends less on program development, training, and management, but that is balanced by spending more time on minor source permits in Linn County.
- Linn County expends 11% of its resources on compliance activities versus 22% at the DNR.
- Forty-one percent (41%) of the Linn County budget is spent on Ambient Monitoring compared to twenty-six percent (26%) statewide.

As the second largest population center and the location of 17 major sources, DNR has directed Linn County to provide a greater level of ambient monitoring work in our contract. Linn County provides the same contracted services as does the State Hygienic Lab (SHL) for ambient monitoring performed elsewhere in the Iowa. Also of note, a benefit of the local program is the ability to provide cost-effective compliance services and compliance assistance. Whether meeting with a local industry or the chamber of commerce, there is little waste in travel or other related transaction costs.

**Issue**  
**Air Quality Fees**  
**Manatts Response To the Air Quality Task Force Paper**  
**Manatts Chooses To Not Sign On To The Report**

**Statement of Issue:**

In the 2013 legislative session the IDNR was charged to facilitate a review the funding of the IDNR regulated air quality program. The purpose was to develop recommendations for the future funding of the program and submit a report of the findings to the General Assembly. IDNR's role was to help facilitate this process and provide information as needed. This committee met five times to analyze the funding issue with two committees making recommendations for funding. The proposal that received the most support includes asking the state legislature for an additional \$2M in funding to maintain the status quo for the department. A report has been drafted with recommendations which will be presented to the Iowa Legislature's review for 2014.

As a member of the committee representing Manatts Inc. and our affiliated companies, I believe there are many reasons Manatts Inc. does not support the submitted report. Those include:

1. The IDNR Minor Source permitting section is currently fully funded and staffed thus meeting the current needs of industry. Those resources come from a general fund appropriation and are less than \$1M. This reflects the public's expectation that the state is in charge of air quality and will not be compromised by their source of funding.
2. There is no federal requirement that small business minor sources pay for their permits and inspections while there is a law that requires Title 5 sources to meet the needs of their permitting and inspection needs.
3. The committee is recommending a sustainable funding source through new fees with no increase to the \$56 per ton fee limit on Title 5 sources. While there are items that possibly need to be funded from general funds, the need is specific to the Title 5 sources to maintain their program and have it operate effectively and efficiently.
4. The report is asking for a redistribution of the funding source to require minor sources pay new regulation fees in addition to additional new state funds to be appropriated annually. While our company is more than willing to work toward additional funding, there are many things that must be in place legislatively and in the rule making process prior to agreeing to support this document.

There are points in the document that I have agreement with:

1. A dedicated line item fund must be established that would receive any new fees established and not be allowed to be used in other IDNR departments.
2. A committee of minor sources must be established to review the department needs similar to the Title 5 group that meets and makes recommendations for their sources

3. Require legislative limits on the amount of resources that can be collected and justification of department needs on an annual basis.
4. Secure language that limits local governments from establishing air quality construction programs

The following were my recommendations to the task force early in the process, some which were addressed and some still pending:

**Proposal for Minor Source Emissions Industry:**

1. Establishment of a committee that would review the funding sources, department needs and authority to recommend to the EPC any changes to the department's budget germane to the minor source construction permits and modifications. (Similar to the Title 5 committee currently in place)
2. Secure language that minor source fees, if established, would allow the resources collected to remain exclusively in the air quality bureau to administer the minor source permit needs. Advocate annually for continued state funding for the minor source permit state funds.
3. Secure language that limits local governments from establishing air quality construction programs (consideration given to retain the 2 counties (Polk/Linn) that currently have permits)
4. Establish a priority system for the review and turn-around time for the acquisition of new minor source permits and modifications from IDNR Air Bureau.
5. Consider legislative action allowing the establishment of fees for minor source **NEW construction, template and registration permits only**. This is designed to help meet the needs of the anticipated 1.9% increase predicted in the IDNR budget.
6. Require legislative limits on the amount of resources that can be collected and justification of department needs on an annual basis. Negotiations would be established during the rulemaking process to achieve the amount of resources that are needed above the current state appropriation to the minor source program.

**I would not support:**

1. Annual permit fees on minor source permits
2. Further local government oversight of air quality regulations (this is a duplication of what the state is currently charged with doing and adds additional burdens on business)
3. Changes in the EIQ reporting that currently exists

---

**From:** [McGuire, Joe \(OMG Midwest\)](#)  
**To:** [McGraw, Jim \(DNR\)](#)  
**Subject:** RE: AQ Stakeholder Group Report for signatures  
**Date:** Tuesday, November 25, 2014 8:38:53 AM

---

Jim

I have been on vacation and have just had a little time to look at this. In general I have not issues with it. I do have concerns about getting any fees collected to be dedicated to for use by the IDNR Air Bureau only. In addition, I support Construction Permit Application fees, but do not support an annual permit fee for minor sources..

I do not have an electronic signature.....so do what you need to do to reflect my support

---

**From:** McGraw, Jim [DNR] [mailto:jim.mcgraw@dnr.iowa.gov]  
**Sent:** Thursday, November 20, 2014 9:33 AM  
**To:** McGraw, Jim [DNR]  
**Cc:** darrellhanson2@gmail.com; Fitzsimmons, Catharine [DNR]; Walker, Wendy [DNR]; Ehm, William [DNR]; Tahtinen, Sharon [DNR]; Gipp, Chuck [DNR]; Laquanda.Hoskins@alcoa.com  
**Subject:** AQ Stakeholder Group Report for signatures  
**Importance:** High

Attached is the final AQ Stakeholder Group report.

As discussed at the Nov 13 meeting, please review the report with your organization. Send me an email indicating whether your organization supports the recommendations included in this report or your organization cannot support all of the recommendations included in this report. Please send me your electronic signature with your email reply. I will affix your electronic signatures to a signature page, which will be inserted into Appendix i of the report. If you wish to include written statements regarding your support or non-support for the report recommendations please include them with your email reply. All statements will be forwarded with the report to the legislature.

**Please send me your email replies by 4 pm on Monday, November 24, 2014.** Please contact me if this deadline will be a problem for you.

Next steps: I will be reviewing the report with the Director and other upper management staff on November 25. **On November 26, time has been scheduled from 9:30-10:30 am in the third floor conference rooms at the Wallace Building for any workgroup members who wish to discuss the report and recommendations with Director Gipp.** A conference line will also be available (866-685-1580, pass code 5152425296). Workgroup members may also email or call (515-281-3388) the Director as desired to discuss the report recommendations.

The report will be submitted to the legislature by December 1. The Director will be discussing the workgroup's recommendations with the Governor's office on December 1 when he is scheduled to overview the DNR's budget for FY16.

Please contact me if you have questions or need additional information.

## Appendix ii: Proposal for a Dedicated Air Quality Fee Fund

## Appendix ii: Proposal for a Dedicated Air Quality Fee Fund

### **New Section: 455B.133C Air quality fund created.**

An air quality fund is created in the office of the treasurer of state under the control of the department.

1. Moneys received from the fees assessed pursuant to section 455B.134, subsection 15, shall be deposited in the fund.
2. Moneys in the fund shall be used solely to defray the costs related to program implementation as provided in Title I of the federal Clean Air Act Amendments of 1990 (42 USC § 7401-7515) as amended November 15, 1990, and in section 455B.134, subsection 15.
3. Notwithstanding section 8.33, any unexpended balance in the fund at the end of each fiscal year shall be retained in the fund. Notwithstanding section 12C.7, any interest and earnings on investments from money in the fund shall be credited to the fund.
4. The following accounts are created within the air quality fund.
  - a. An asbestos account. Moneys received from the asbestos notification fee imposed under section [455B.134(15)] shall be deposited in the asbestos account. Moneys shall be allocated solely for the administration of the asbestos program.
  - b. A major source account. Moneys received from fees imposed under section [455B.134(15)] shall be deposited in the major source account. Moneys shall be allocated for the direct and indirect cost to implement programs to grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing major air contaminant sources and for related control equipment.
  - c. A minor source account. Moneys received from the minor source construction permit application fees imposed under section [455B.134(15)] shall be deposited in the minor source account. Moneys shall be allocated for the direct and indirect cost to implement programs to grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing minor air contaminant sources and for related control equipment.

### **455B.134 Director — duties — limitations – new subsection 15.**

The director shall:

#### **New Subsection 15**

15. The commission may impose application, notification, and registration fees in an amount sufficient to cover costs associated with the above activities in conformance with the federal Clean Air Act Amendments of 1990. The fees collected pursuant to this subparagraph shall be deposited in the air quality fund created pursuant to section 455B.133C, and shall be utilized solely to cover all reasonable costs required to develop and administer the programs required by Title I of the federal Clean Air Act Amendments of 1990 (42 USC § 7401-7515).

**Appendix iii: Budget Proposal for Air Quality - FY 2016- 2019**

| <b>Programmatic Expenditures</b>                | <b>Draft FY 2016</b> | <b>Draft FY 2017</b> | <b>Draft FY 2018</b> | <b>Draft FY 2019</b> |
|-------------------------------------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Operating Permits</b>                        |                      |                      |                      |                      |
| Application Review & Permit Issuance            | 1,061,400            | 1,081,600            | 1,102,200            | 1,123,100            |
| -Additional Title V Staff                       |                      | 120,000              | 120,000              | 120,000              |
| Field Inspection                                | 361,300              | 368,200              | 375,200              | 382,300              |
| Compliance Assistance & Enforcement             | 417,400              | 425,300              | 433,400              | 441,600              |
| Local Program implementation of the CAA         | 1,443,900            | 1,471,300            | 1,499,300            | 1,527,800            |
| Rules, Budget, Contracts                        | 168,200              | 171,400              | 174,700              | 178,000              |
| Legal Services Activities                       | 49,000               | 49,900               | 50,800               | 51,800               |
| Management, Secretarial & Data Support*         | 257,900              | 262,800              | 267,800              | 272,900              |
| <b>Subtotal</b>                                 | <b>3,759,100</b>     | <b>3,950,500</b>     | <b>4,023,400</b>     | <b>4,097,500</b>     |
| <b>Major Source Construction Permitting</b>     |                      |                      |                      |                      |
| Application Review & Permit Issuance            | 951,900              | 970,000              | 988,400              | 1,007,200            |
| Modeling                                        | 101,200              | 103,100              | 105,100              | 107,100              |
| Source Oriented Monitors                        | 453,900              | 462,500              | 471,300              | 480,300              |
| Field Inspection                                | 120,400              | 122,700              | 125,000              | 127,400              |
| Compliance Assistance & Enforcement             | 187,800              | 191,400              | 195,000              | 198,700              |
| Rules, Budget, Contracts                        | 141,000              | 143,700              | 146,400              | 149,200              |
| Legal Services Activities                       | 42,500               | 43,300               | 44,100               | 44,900               |
| Management, Secretarial & Data Support          | 257,800              | 262,700              | 267,700              | 272,800              |
| <b>Subtotal</b>                                 | <b>2,256,500</b>     | <b>2,299,400</b>     | <b>2,343,000</b>     | <b>2,387,600</b>     |
| <b>PSD Permitting</b>                           |                      |                      |                      |                      |
| Application Review & Permit Issuance            | 237,900              | 242,400              | 247,000              | 251,700              |
| Modeling - PSD                                  | 101,200              | 103,100              | 105,100              | 107,100              |
| Ambient Monitoring - PSD Background & Transport | 355,900              | 362,700              | 369,600              | 376,600              |
| Field Inspection                                | 301,100              | 306,800              | 312,600              | 318,500              |
| Compliance Assistance & Enforcement             | 104,300              | 106,300              | 108,300              | 110,400              |
| Rules, Budget, Contracts                        | 141,000              | 143,700              | 146,400              | 149,200              |
| Legal Services Activities                       | 42,500               | 43,300               | 44,100               | 44,900               |
| Management, Secretarial & Data Support          | 257,800              | 262,700              | 267,700              | 272,800              |
| <b>Subtotal</b>                                 | <b>1,541,700</b>     | <b>1,571,000</b>     | <b>1,600,800</b>     | <b>1,631,200</b>     |
| <b>Minor Source Construction Permitting</b>     |                      |                      |                      |                      |
| Application Review & Permit Issuance            | 416,500              |                      |                      |                      |
| Minor Source Fees (40%)                         |                      | 169,800              | 173,000              | 176,300              |
| General Fund (60%)                              |                      | 254,600              | 259,500              | 264,400              |
| Modeling                                        | 151,700              |                      |                      |                      |
| Minor Source Fees (40%)                         |                      | 61,800               | 63,000               | 64,200               |
| General Fund (60%)                              |                      | 92,800               | 94,500               | 96,300               |
| Field Inspection                                | 180,700              | 184,100              | 187,600              | 191,200              |
| Compliance Assistance & Enforcement             | 160,700              | 163,800              | 166,900              | 170,100              |
| Legal Services Activities                       | 17,000               | 17,300               | 17,600               | 17,900               |
| Management, Secretarial & Data Support          | 57,300               | 58,400               | 59,500               | 60,600               |
| <b>Subtotal</b>                                 | <b>983,900</b>       | <b>1,002,600</b>     | <b>1,021,600</b>     | <b>1,041,000</b>     |
| <b>Core Program Activities</b>                  |                      |                      |                      |                      |
| Complaint Response                              | 180,700              | 184,100              | 187,600              | 191,200              |
| Compliance Assistance & Enforcement             | 68,900               | 70,200               | 71,500               | 72,900               |
| Asbestos (1)                                    | 111,800              | 130,000              | 132,500              | 135,000              |
| Local Program implementation of the CAA (2)     | 335,200              | 335,200              | 335,200              | 335,200              |
| EIQ (AERR requirement; CAA 110 & 172)           |                      |                      |                      |                      |
| Title V Fees (90%)                              | 390,200              | 397,600              | 405,200              | 412,900              |
| General Fund (10%)                              | 43,400               | 44,200               | 45,000               | 45,900               |

Appendix iii: Budget Proposal for Air Quality - FY 2016- 2019

| <b>Programmatic Expenditures</b>           | <b>Draft FY 2016</b> | <b>Draft FY 2017</b> | <b>Draft FY 2018</b> | <b>Draft FY 2019</b> |
|--------------------------------------------|----------------------|----------------------|----------------------|----------------------|
| Ambient Monitoring - population monitors   | 2,162,500            | 2,203,600            | 2,245,500            | 2,288,200            |
| Rules, Budget, Contracts                   |                      |                      |                      |                      |
| Title V Fees (90%)                         | 152,300              | 155,200              | 158,100              | 161,100              |
| General Fund (10%)                         | 16,900               | 17,200               | 17,600               | 17,900               |
| AQB/UNI Small Business Assistance          |                      |                      |                      |                      |
| Title V Fees (75%)                         | 272,800              | 278,000              | 283,200              | 288,600              |
| General Fund (25%)                         | 90,900               | 92,600               | 94,400               | 96,200               |
| SIP Activities                             |                      |                      |                      |                      |
| Title V Fees (75%)                         | 353,900              | 360,700              | 367,500              | 374,500              |
| General Fund (25%)                         | 118,000              | 120,200              | 122,500              | 124,800              |
| Legal Services Activities                  |                      |                      |                      |                      |
| Title V Fees (25%)                         | 12,300               | 12,500               | 12,700               | 13,000               |
| General Fund (75%)                         | 36,800               | 37,500               | 38,300               | 39,000               |
| Management, Secretarial & Data Support (3) |                      |                      |                      |                      |
| Title V Fees (75%)                         | 100,200              | 106,900              | 113,800              | 120,500              |
| General Fund (25%)                         | 33,400               | 35,700               | 37,900               | 40,200               |
| <b>Subtotal</b>                            | <b>4,480,200</b>     | <b>4,581,400</b>     | <b>4,668,500</b>     | <b>4,757,100</b>     |
| <b>Rounded Total</b>                       | <b>13,021,400</b>    | <b>13,404,900</b>    | <b>13,657,300</b>    | <b>13,914,400</b>    |

**Cost Allocation Summaries:**

|                                                |                   |                   |                   |                   |
|------------------------------------------------|-------------------|-------------------|-------------------|-------------------|
| -Title V Emission Fees                         | 8,029,200         | 5,686,400         | 5,799,000         | 5,913,800         |
| -Title V Operating Permit Issuance Fees        | -                 | 1,201,600         | 1,222,200         | 1,243,100         |
| -Major Source Permit Issuance Fees             | -                 | 1,418,600         | 1,445,600         | 1,473,100         |
| -Minor Source Permit Issuance Fees             | -                 | 231,600           | 236,000           | 240,500           |
| -Asbestos Fees                                 | 111,800           | 130,000           | 132,500           | 135,000           |
| -General Fund/Environment First/Federal Grants | 4,880,400         | 4,736,700         | 4,822,000         | 4,908,900         |
| <b>Total:</b>                                  | <b>13,021,400</b> | <b>13,404,900</b> | <b>13,657,300</b> | <b>13,914,400</b> |

| <b>Estimated Revenues</b>                      | <b>Draft FY 2016</b> | <b>Draft FY 2017</b> | <b>Draft FY 2018</b> | <b>Draft FY 2019</b> |
|------------------------------------------------|----------------------|----------------------|----------------------|----------------------|
| General Fund                                   | 704,300              | 704,300              | 704,300              | 704,300              |
| Environment First                              | 425,000              | 425,000              | 425,000              | 425,000              |
| Federal Program Grant                          | 1,250,000            | 1,250,000            | 1,250,000            | 1,250,000            |
| Federal Monitoring Grant (Fed 103)             | 472,600              | 472,600              | 472,600              | 472,600              |
| Title V Fees (Projected Tonnage @ \$56/ton)    | 7,348,200            | 6,059,400            | 5,273,500            | 5,274,500            |
| Tons:                                          | 131,218              | 108,203              | 94,170               | 94,188               |
| SWAP/Asbestos                                  | 77,400               | -                    | -                    | -                    |
| Asbestos User Fees                             | -                    | 130,000              | 132,500              | 135,000              |
| Title V Operating Permit Issuance Fees         | -                    | 1,201,600            | 1,222,200            | 1,243,100            |
| Major Source Permit Issuance Fees              | -                    | 1,418,600            | 1,445,600            | 1,473,100            |
| Minor Source Permit Issuance Fees              | -                    | 231,600              | 236,000              | 240,500              |
| <b>Total</b>                                   | <b>10,277,500</b>    | <b>11,893,100</b>    | <b>11,161,700</b>    | <b>11,218,100</b>    |
| <b>Shortfalls:</b>                             | <b>-2,743,900</b>    | <b>-1,511,800</b>    | <b>-2,495,600</b>    | <b>-2,696,300</b>    |
| -Title V Emission Fees                         | -681,000             | 373,000              | -525,500             | -639,300             |
| -Title V Operating Permit Issuance Fees        | 0                    | 0                    | 0                    | 0                    |
| -Major Source Permit Issuance Fees             | 0                    | 0                    | 0                    | 0                    |
| -Minor Source Permit Issuance Fees             | 0                    | 0                    | 0                    | 0                    |
| -Asbestos Fees (SWAP for 2016)                 | -34,400              | 0                    | 0                    | 0                    |
| -General Fund/Environment First/Federal Grants | -2,028,500           | -1,884,800           | -1,970,100           | -2,057,000           |

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**6**

**DECISION**

**TOPIC**

State Implementation Plan Revision for Council Bluffs Lead Nonattainment Area

---

The U.S. EPA designated a portion of Council Bluffs as a nonattainment area for lead (Pb) in 2011. The Department is revising the State Implementation Plan (SIP) to ensure the 2008 lead National Ambient Air Quality Standards (NAAQS) will be attained and maintained in the area. The Commission is requested to approve the SIP revision for preventing future violations of the lead NAAQS in Council Bluffs. Upon approval from the Commission, the SIP will be forwarded to U.S. EPA for federal notice and approval.

**Reason for SIP Revision**

On November 22, 2011, the U.S. EPA issued a final rule designating a portion of Pottawattamie County, Iowa, as a lead nonattainment area. The nonattainment designation occurred after EPA revisions of the lead standard in 2008 that strengthened health protections by a factor of ten while also requiring new air monitors next to larger lead sources. The revised lead NAAQS requires that 3-month rolling average lead concentrations to be at or less than 0.15 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ). Ambient air measurements in Council Bluffs in 2010 showed six 3-month rolling average lead values over EPA's  $0.15 \mu\text{g}/\text{m}^3$  standard.

The Department must submit to EPA a revision to the SIP that demonstrates how the area will attain the lead NAAQS in a timely manner. To reduce lead concentrations in the air and satisfy federal requirements the SIP revision requires that all significant lead sources in the nonattainment area implement reasonably available control measures as quickly as possible. An air quality modeling demonstration conducted by the Department shows that the control measures will reduce lead emissions and their impacts and that the area will meet the lead NAAQS within the five year attainment deadline (December 31, 2016).

**Affected Sources**

The Department determined that two sources of air pollution within the Council Bluffs lead nonattainment area contribute to predicted (modeled) lead NAAQS violations of the standard in the vicinity of the lead monitor. These facilities are Griffin Pipe Products Co. LLC (Griffin Pipe) and Alter Metal Recycling.

**Lead Control Strategy**

Control measures providing for expeditious attainment of the lead NAAQS were developed based on air quality modeling data and facility-specific operating conditions. Alter Metal Recycling and Griffin Pipe must both reduce lead emissions associated with their haul road traffic by 90-95%. Haul road sweeping/cleaning reduces the amount of silt on facility

roadways, which testing showed contained lead. Alter Metal Recycling must also pave any unpaved road segments or discontinue their use and comply with material processing limits.

Control measures at Griffin Pipe incorporate the installation of two baghouses associated with Prevention of Significant Deterioration (PSD) permits issued before the area was designated nonattainment. New control measures were added which account for the idling of the plant in May of 2014. When pipe production operations resume at Griffin Pipe an Administrative Consent Order provides the facility with the flexibility to choose between two control options. Both options include:

- Regular sweeping/cleaning of road surfaces;
- New lead emission limits on existing sources;
- Implementing best management practices to reduce lead emissions, such as posting speed limit signs and cleaning in appropriate situations to minimize fugitive emissions.

The control strategy designated Option A can be implemented quickly should the plant resume operation. It includes limiting scrap melting operations to 1,250 hours in any 3-month rolling period and restricting the shipment of bulk materials (raw and product) between certain hours. The control strategy designated Option B requires a new baghouse to further reduce lead emissions from an existing roof vent that includes emissions from the small diameter casting process. The additional control allows for the removal of the restrictions listed above in Option A.

The control strategy is enforceable through an Administrative Consent Order with Griffin Pipe and a construction permit issued to Alter Metal Recycling. Implementation of roadway sweeping and paving activities are underway at Alter Metal Recycling and Griffin Pipe's measures (either option A or Option B) must be implemented when they resume operations.

### **Summary of Public Comment Activities**

The public comment period for the SIP revision was held from November 20 through December 22, 2014, and included a public hearing in Council Bluffs on December 22, 2013. Minor modifications to the SIP revision document and the Administrative Consent Order with Griffin Pipe were made in response to the three written comments and one oral comment received during the comment period. The responsiveness summary for the public comment period is included with the SIP revision document.

Matthew Johnson  
Environmental Specialist Senior  
Program Development Section, Air Quality Bureau  
Memo date: December 29, 2014

# State Implementation Plan

## Lead Non-Attainment Council Bluffs, Iowa

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**Iowa Department of Natural Resources  
Environmental Services Division  
Air Quality Bureau  
7900 Hickman Rd Suite 1  
Windsor Heights, IA 50324**

1/21/2015

## Executive Summary

Lead is an air pollutant linked to adverse health effects upon IQ, behavior, and learning, particularly among children. To help protect public health and welfare the U.S. Environmental Protection Agency (EPA) establishes and periodically revises National Ambient Air Quality Standards (NAAQS) for six types of air pollutants, known as criteria pollutants. Lead is one of the criteria pollutants and EPA first established a lead NAAQS in 1978.

The 1978 lead NAAQS remained in place until 2008 when EPA tightened the standards, lowering the acceptable ambient lead levels by an order of magnitude, to  $0.15 \mu\text{g}/\text{m}^3$ , never to be exceeded by any three-month rolling average. EPA's revision of the lead NAAQS also required new efforts to evaluate emissions from existing lead sources. An outcome of this process is that the Iowa Department of Natural Resources (DNR) started operating a new lead monitor in Council Bluffs in November 2009. This monitor recorded ambient lead concentrations in 2010 that did not meet the revised standard. As a consequence a portion of Council Bluffs was designated a lead nonattainment area, effective December 31, 2011.

The Iowa DNR is required by the federal Clean Air Act and EPA's associated nonattainment regulations to submit a plan to eliminate the unhealthy ambient lead levels. This document, referred to as a lead nonattainment SIP, constitutes that plan and it is designed to fulfill all associated obligations. Required elements of a nonattainment plan include, for example, an assessment of the lead sources in the area, the identification of control measures needed to bring the area back into attainment, and an attainment demonstration supporting the effectiveness of the control measures.

Two sources within the lead nonattainment area emit lead, Griffin Pipe Products Co., LLC (Griffin Pipe) and Alter Metal Recycling. Griffin Pipe manufactures ductile iron pipe for potable water transmission and other uses. Alter Metal Recycling is a scrap metal recycler. The two facilities are located next to one another near the lead monitor.

The control measures require lead emissions reductions from both facilities. Although operations at Griffin Pipe are temporarily suspended the facility must implement one of two available control strategies when operations resume. Both strategies require haul road sweeping and include new emissions limits on existing lead sources. One option adds limits on the hours of operations while the second option requires the installation of a new baghouse to control existing sources. The control measures for Alter Metal Recycling require roadway sweeping efforts designed to reduce haul road lead emissions by 95%. The sweeping requirements went into effect September 9, 2014.

All lead control measures are federally enforceable and have reduced actual and potential lead emissions within the nonattainment area. The most recent monitored lead NAAQS violation occurred in 2012 during the September through November 3-month rolling average. No new lead NAAQS violations are anticipated. Attainment is expected in an expeditious manner consistent with federal requirements, no later than December 31, 2016.

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## 1. Introduction

On November 22, 2011, the U.S. Environmental Protection Agency (EPA) issued a final rule ([76 FR 72097](#)) designating a portion of Pottawattamie County, Iowa, as a lead (Pb) nonattainment area. The federal Clean Air Act (CAA) requires a state with a lead nonattainment area to submit to EPA a State Implementation Plan (SIP) revision that demonstrates how the area will attain the lead National Ambient Air Quality Standards (NAAQS). The lead NAAQS must be achieved as quickly as possible and no later than 5 years after the effective date of the designation. The nonattainment designation for an area in Council Bluffs became effective on December 31, 2011, and therefore the lead NAAQS must be achieved no later than December 31, 2016. The Iowa Department of Natural Resources (DNR) developed this document and the associated control measures to fulfill those and all other applicable nonattainment SIP requirements.

### 1.1. National Ambient Air Quality Standards

Lead is a naturally occurring metal that can be harmful to human health and is one of six common air pollutants regulated by the EPA using NAAQS. Primary NAAQS are criteria established by EPA that set limits on air pollution necessary to protect human health with an adequate margin of safety. Secondary NAAQS protect public welfare (public welfare protections consider, for example, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, and visibility). The primary and secondary NAAQS for lead are identical. The CAA requires EPA to review the NAAQS every five years and, if necessary, update the standards to ensure they provide adequate health and welfare protections.

The EPA first established health standards for lead on October 5, 1978 (43 FR 46246). At that time the lead NAAQS were set at a level of 1.5 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ), averaged over a calendar quarter. On October 15, 2008, EPA promulgated a revision to the standard, lowering the level by an order of magnitude, from 1.5  $\mu\text{g}/\text{m}^3$  to 0.15  $\mu\text{g}/\text{m}^3$ . The averaging period was also revised, from a calendar quarter to a three-month rolling average. To meet EPA's new health standard, no three-month rolling average lead concentrations may exceed 0.15  $\mu\text{g}/\text{m}^3$  across a consecutive three-year period. The secondary standard was also revised, to be identical to the new primary standard. The 2008 lead NAAQS are summarized in Table 1-1. For additional information on the 2008 lead NAAQS revision see the preamble and rule language published in the Federal Register on November 12, 2008 ([73 FR 66964](#)).

Table 1-1. Summary of the 2008 lead NAAQS. The primary and secondary standards are identical.

| Pollutant | Averaging Time          | Level                         | Form               |
|-----------|-------------------------|-------------------------------|--------------------|
| Lead (Pb) | 3-month rolling average | 0.15 $\mu\text{g}/\text{m}^3$ | Not to be exceeded |

### 1.2. Lead Nonattainment Designation

Following a NAAQS revision, Section 107(d) of the CAA requires the states and EPA to complete a designations process. An area that does not meet the standard, or an area that contributes to a nearby area not meeting the standard, is classified as a nonattainment area. On November 3, 2009, a required source-oriented lead monitor began operation in Council Bluffs, Iowa. In the following year (2010), 6 three-month rolling averages greater than 0.15  $\mu\text{g}/\text{m}^3$  Pb NAAQS were measured. The highest value, 0.26  $\mu\text{g}/\text{m}^3$ , occurred in the June-August 2010 average. The EPA designated a portion of Pottawattamie County as a nonattainment area in response to the measured lead concentrations.

At approximately 950 square miles, Pottawattamie County is the second largest county in Iowa by geographical area, the 8<sup>th</sup> largest by population with 93,518 inhabitants<sup>1</sup>, and is part of the Omaha (Nebraska)-Council Bluffs (Iowa) metropolitan statistical area. The statewide perspective of the location of Pottawattamie County is depicted in Figure 1-1.



Figure 1-1. Reference map illustrating the location of Pottawattamie County (in yellow) within Iowa.

The nonattainment designation was published in the Federal Register on November 22, 2011 ([76 FR 72097](#)) and became effective December 31, 2011. The official definition of the nonattainment boundary is contained in the Code of Federal Regulations (CFR) at 40 CFR 81.316 as the "Area bounded by Avenue G on the north, N 16th/S 16th street on the east, 23rd Avenue on the south, and N 35th/S 35th street on the west." This definition is summarized in Table 1-2.

Table 1-2. Roadway boundaries used to define the lead nonattainment area.

|                   |                                                |
|-------------------|------------------------------------------------|
| Northern boundary | Avenue G                                       |
| Eastern boundary  | N 16 <sup>th</sup> / S 16 <sup>th</sup> Street |
| Southern boundary | 23 <sup>rd</sup> Avenue                        |
| Western boundary  | N 35 <sup>th</sup> / S 35 <sup>th</sup> Street |

While it is not clear from the CFR the lead nonattainment area is located entirely within the city of Council Bluffs, Iowa. The nonattainment area encompasses about 3.43 square miles within the city and is approximately centered on the locations of the lead monitor and two lead emitting sources, Griffin Pipe Products Co., LLC (Griffin Pipe) and Alter Metal Recycling, which are all near the intersections of 9<sup>th</sup> Ave and S 27<sup>th</sup> St as shown in Figure 1-2.

<sup>1</sup>July 1, 2011, US Census Bureau data: <http://www.census.gov/popest/data/counties/totals/2011/index.html>

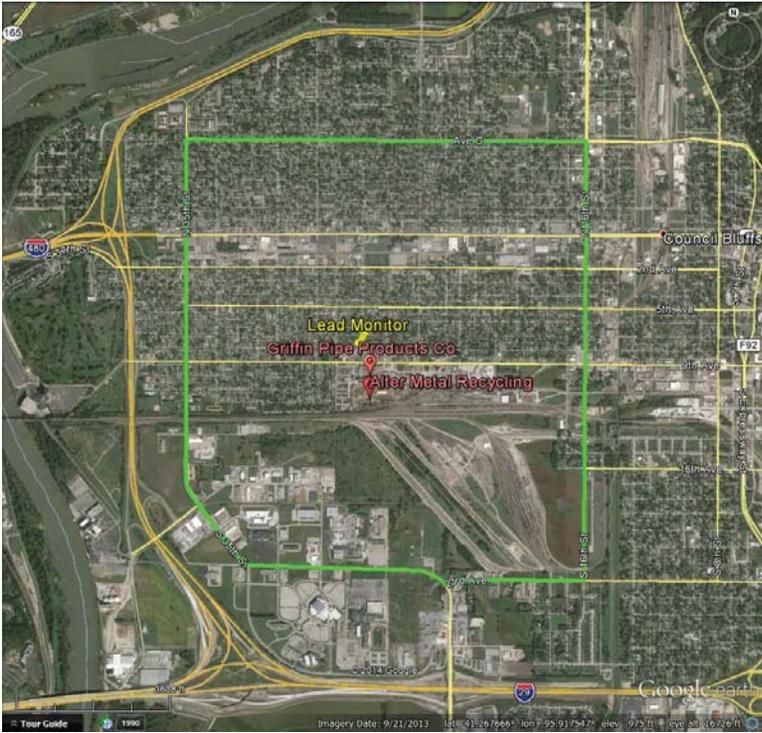


Figure 1-2. Depiction (in green) of the lead nonattainment area within the city of Council Bluffs, Iowa, and the relative locations of Griffin Pipe, Alter Metal Recycling, and the lead monitor.

### 1.3. Description of the Nonattainment Area

Council Bluffs is located on the western edge of Pottawattamie County, along the Missouri River. The topography of Pottawattamie County consists of flat river bottoms in width from 3 to 10 miles along the Missouri River. Bluffs extending 100 to 300 feet above the river plain demark the extent of the generally level bottomlands. Moving eastward beyond the bluffs the topography transitions into areas of steep ravines and hills, followed by gently rolling prairie.<sup>2</sup> A topographic depiction of the region around the nonattainment area is shown in Figure 1-3.

<sup>2</sup>[http://en.wikisource.org/wiki/History\\_of\\_Iowa\\_From\\_the\\_Earliest\\_Times\\_to\\_the\\_Beginning\\_of\\_the\\_Twentieth\\_Century/3/Countries/Pottawattamie](http://en.wikisource.org/wiki/History_of_Iowa_From_the_Earliest_Times_to_the_Beginning_of_the_Twentieth_Century/3/Countries/Pottawattamie)

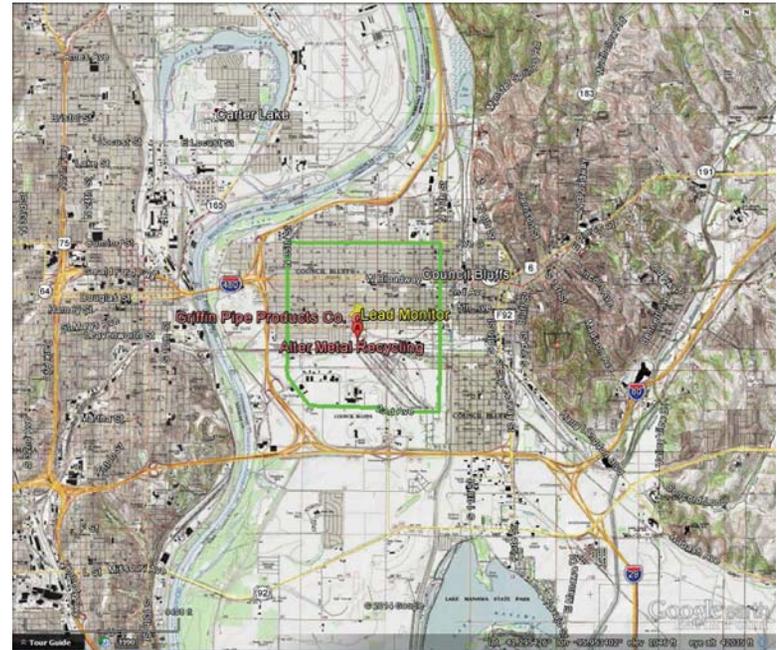


Figure 1-3. Topographic features within the vicinity of the nonattainment area.

The topography within the nonattainment area is comparable to flat river bottoms, displays negligible changes in elevation, and does not exhibit features that would create a consistent barrier capable of segregating the area into distinct airsheds. While river influenced flows are probable in this region they are not expected to significantly influence lead emissions or concentrations not otherwise accounted for in the meteorological data (from Epley Airfield – the Omaha airport) used in the dispersion modeling.

Griffin Pipe is located just south of the source oriented lead monitor. Lying immediately south of Griffin Pipe is Alter Metal Recycling. The area surrounding the monitor generally consists of a mix of industrial and residential properties. A rail yard occupies much of the land south of Alter Metal Recycling. Residential housing is found in the area immediately west and also near the northern border of Griffin Pipe. Figure 1-4 illustrates the approximate property boundaries of Griffin Pipe and Alter Metal Recycling, relative to the lead monitor (boundary data obtained from: <http://gis.pottcounty.com>).



Figure 1-4. Approximate property boundaries for Griffin Pipe (blue) and Alter Metal Recycling (green). The lead monitor is at approximate latitude, longitude: 41.254223, -95.887297.

#### 1.4. Summary of Air Quality Data

In the 2008 lead NAAQS revisions (73 FR 66964, November 12, 2008) EPA included provisions to expand the lead monitoring network. One phase of the expansion required the addition of source oriented monitors located to measure the maximum lead concentrations near sources with lead emissions of 1.0 tons<sup>3</sup> per year or more. Source-oriented monitors not eligible for an exemption based on dispersion modeling were required to be operational by January 1, 2010. The monitoring criteria resulted in one new source-oriented lead monitor being added in the state, sited near the Griffin Pipe facility. The monitor (site ID 191550011) is located approximately 250 feet north of the Griffin Pipe facility, near the intersections of 8<sup>th</sup> Ave and S 27<sup>th</sup> St in Council Bluffs. The monitor started operation on November 3, 2009, measuring lead concentrations in total suspended particulate (TSP) and reporting concentrations in local conditions.

Although a lead design value is based on three years of three-month rolling averages, a single three-month average over the standard constitutes a NAAQS violation because the form of the standard does not allow any exceedances. Determining that an area does not attain the standard can therefore be done with three months of data if that average is over 0.15 µg/m<sup>3</sup>. The EPA utilized this characteristic of the lead NAAQS to issue a second round of lead designations in 2011, based on 2010 data from newly sited source-oriented monitors. The lead nonattainment designation in Council Bluffs occurred on that schedule.

<sup>3</sup> EPA later reduced the lead emissions threshold from 1.0 to 0.5 tons per year (75 FR 81126, December 27, 2010).

The Council Bluffs lead monitor recorded 6 three-month rolling averages violating the lead NAAQS in 2010. The highest of these 3-month rolling averages occurred over the period June – August and was 0.26 µg/m<sup>3</sup> (see Table 1-3). The latest available certified lead data includes measurements through 2013. While no additional NAAQS violations were recorded in 2011, four occurred in 2012. No new NAAQS violations occurred in 2013. The three-month rolling average lead data are charted in Figure 1-5.

Table 1-3. Three-month rolling average lead concentrations at the Council Bluffs lead monitor. NAAQS violations are indicated in red. The month provided indicates the ending month of the three month-rolling average (averages for January and February include data from the preceding year).

| 2010 | 3-Month Rolling Average | 2011 | 3-Month Rolling Average | 2012 | 3-Month Rolling Average | 2013 | 3-Month Rolling Average |
|------|-------------------------|------|-------------------------|------|-------------------------|------|-------------------------|
| Jan  | 0.10                    | Jan  | 0.05                    | Jan  | 0.08                    | Jan  | 0.09                    |
| Feb  | 0.03                    | Feb  | 0.03                    | Feb  | 0.05                    | Feb  | 0.07                    |
| Mar  | 0.07                    | Mar  | 0.07                    | Mar  | 0.07                    | Mar  | 0.05                    |
| Apr  | 0.12                    | Apr  | 0.07                    | Apr  | 0.07                    | Apr  | 0.05                    |
| May  | 0.14                    | May  | 0.11                    | May  | 0.10                    | May  | 0.05                    |
| Jun  | 0.17                    | Jun  | 0.10                    | Jun  | 0.10                    | Jun  | 0.07                    |
| Jul  | 0.20                    | Jul  | 0.14                    | Jul  | 0.14                    | Jul  | 0.09                    |
| Aug  | 0.26                    | Aug  | 0.12                    | Aug  | 0.18                    | Aug  | 0.13                    |
| Sep  | 0.24                    | Sep  | 0.09                    | Sep  | 0.19                    | Sep  | 0.12                    |
| Oct  | 0.25                    | Oct  | 0.08                    | Oct  | 0.20                    | Oct  | 0.10                    |
| Nov  | 0.18                    | Nov  | 0.09                    | Nov  | 0.16                    | Nov  | 0.05                    |
| Dec  | 0.14                    | Dec  | 0.10                    | Dec  | 0.14                    | Dec  | 0.04                    |

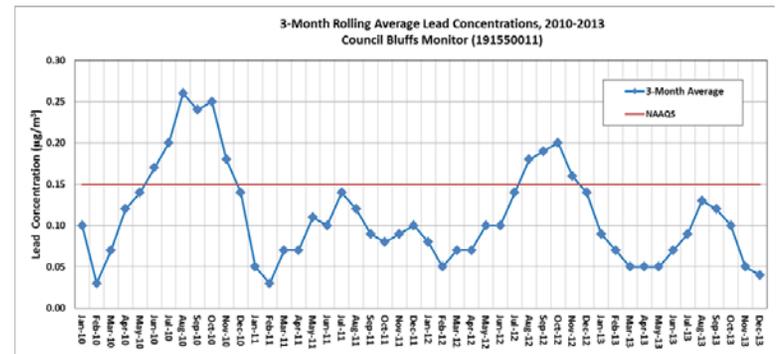


Figure 1-5. Three-month rolling average lead concentrations from the Council Bluffs lead monitor, November 2009 – December 2013 certified data.

## 1.5. Affected Sources

Two lead sources were identified within the nonattainment area, Griffin Pipe Products Co., LLC, and Alter Metal Recycling. Griffin Pipe is considered a major source for Title V and Prevention of Significant Deterioration (PSD) purposes. Alter Metal Recycling is a minor source.

### Griffin Pipe

Griffin Pipe manufactures ductile iron pressure pipe for potable water transmission and wastewater collection. Using North American Industry Classification System (NAICS) descriptions the facility is considered a gray iron foundry associated with NAICS code 331511. The facility in Council Bluffs covers more than 105,000 square feet on a nineteen (19) acre site. The plant produces ductile iron pressure pipe in twenty (20) foot lengths and diameters ranging from 6" through 48".

The hot iron required in the pipe manufacturing process is produced in a cupola. The cupola uses coke, scrap iron, scrap steel, and fluxes as raw materials. After the hot iron leaves the cupola it is treated in a desulfurization process and a magnesium inoculation process. Desulfurization removes undesirable sulfur from the metal and magnesium inoculation uses magnesium to give the metal the physical properties needed to produce the ductile iron pipe.<sup>4</sup> Lead present in the scrap is emitted as the metals are melted in the cupola, treated in the desulfurization and magnesium inoculation processes, and cast.

On February 4, 2014, U.S. Pipe and Foundry Company announced the acquisition of a majority interest in Griffin Pipe. On March 3, 2014, the facility ceased operating the cupola (melting operations were suspended) with finishing operations ending on March 7, 2014. The plant was idled on May 3, 2014.<sup>5</sup> Griffin Pipe does not consider the idling of the plant a permanent shutdown and will resume operations (pipe production) when economic conditions warrant.

### Alter Metal Recycling

Alter Metal Recycling is a scrap material processing facility associated with Alter Trading Corporation. Alter Trading is a privately owned company founded in 1898, with trading offices and processing plants across the central United States.<sup>6</sup> The Council Bluffs facility is one of several scrap processing facilities in Iowa. The Council Bluffs facility receives waste metal, for example, used cars, and operates a shredder (hammer mill) that reduces the incoming material into more manageable sizes. The facility is considered a minor source. Lead emissions from Alter Metal Recycling occur predominantly from fugitive emissions associated with vehicle traffic on facility roadways when roadway silt containing lead becomes airborne.

<sup>4</sup> From Griffin Pipe's January 21, 2010 PSD application.

<sup>5</sup> Some pipe storage and pipe shipping activities may occur after that date.

<sup>6</sup> [http://altertrading.com/company\\_history.shtml](http://altertrading.com/company_history.shtml)

## 2. Nonattainment SIP Requirements

This SIP submittal is intended to fulfill the obligations of a lead nonattainment SIP.<sup>7</sup> As discussed in more detail in the preamble to the final lead NAAQS revisions (73 FR 66964, November 12, 2008), the nonattainment SIP must meet the requirements of subpart 1 of Part D of the Clean Air Act, including those specified in Section 172(c). The required plan elements in CAA §172(c) are summarized (simplified, clarified, and paraphrased) in Table 2-1. Details are provided in later chapters.

Table 2-1. Summary of Clean Air Act §172(c) nonattainment SIP requirements.

|                |                                                                                                                                                                                                                                                 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAA §172(c)(1) | Provisions for attainment and the timely implementation of all Reasonably Available Control Measures (RACM) & Reasonably Available Control Technologies (RACT).                                                                                 |
| CAA §172(c)(2) | Reasonable further progress (RFP) requirements (met by appropriate emission reductions and implementation timelines).                                                                                                                           |
| CAA §172(c)(3) | Compile a comprehensive, accurate, and current inventory of actual emissions.                                                                                                                                                                   |
| CAA §172(c)(4) | Identify and quantify emissions which will be allowed, in accordance with CAA §173(a)(1)(B), from the construction/operation of major new or modified stationary sources. Demonstrate such emissions will be consistent with RFP and the NAAQS. |
| CAA §172(c)(5) | Include provisions to implement nonattainment new source review requirements.                                                                                                                                                                   |
| CAA §172(c)(6) | Develop a control strategy with schedules and timetables for compliance and enforceable emissions limits or other control measures necessary for the timely attainment of the NAAQS.                                                            |
| CAA §172(c)(7) | Comply with the applicable provisions of CAA §110(a)(2).                                                                                                                                                                                        |
| CAA §172(c)(8) | This element allows the use equivalent techniques for modeling, emissions inventory, or planning procedures (if no less stringent than any standard methods).                                                                                   |
| CAA §172(c)(9) | Provide for the implementation of contingency measures if the area does not make RFP or if the area does not attain the standard by the required attainment date.                                                                               |

Compilation of the emissions inventory typically occurs early in the SIP development process to help identify potentially important sources. The various control measures (which incorporate RACT/RACM) included in the control strategy consider implementation timeframes to ensure reasonable further progress (RFP) requirements are met and to ensure the NAAQS are attained as expeditiously as practicable. By law, the area must attain the standard within 5 years of the date of the nonattainment designation. The nonattainment designation became effective December 31, 2011, and thus the attainment date can be no later than December 31, 2016.

An attainment demonstration provides evidence that the overall control strategy is sufficient to achieve the NAAQS within the regulatory timelines. The attainment demonstration is completed using air quality dispersion models in accordance with Appendix W of 40 CFR 51. The control strategy must also contain a description of enforcement methods, including procedures for monitoring compliance and handling violations. Additional information regarding control strategy related requirements can be found in 40 CFR 51 Subpart G.

The state is demonstrating in this lead nonattainment SIP that it has met all applicable obligations, including applicable provisions reviewed in Table 2-1, the necessary public participation requirements, and all applicable administrative requirements in 40 CFR 51.

<sup>7</sup> While technically this document is a SIP revision, for simplicity it is often referred to as a lead nonattainment SIP.

### 3. 2010 Baseyear Lead Emissions Inventory

A comprehensive, accurate, and current inventory of actual lead emissions within the nonattainment area is a required component of the nonattainment SIP per CAA §172(c)(3). Special provisions pertaining to the submittal of lead emissions inventory data are found in 40 CFR 51.117. Among the requirements is 40 CFR 51.117(e): “Emissions data. (1) The point source inventory on which the summary of the baseline for lead emissions inventory is based must contain all sources that emit 0.5 or more tons of lead per year.”

The baseyear inventory establishes a baseline and is used to evaluate emissions reductions achieved by the control strategy and to assess reasonable further progress requirements. The DNR is selecting calendar year 2010 as the baseyear as it corresponds to the first year in which lead NAAQS violations were measured at the lead monitor. In 2010, two facilities within the nonattainment area emitted more than one pound of lead per year, Griffin Pipe and Alter Metal Recycling.<sup>8</sup> Baseyear lead emissions estimates are provided in Table 3-1 and were calculated by the DNR using stack test results, information submitted by the facility, state review, and engineering estimates.

Table 3-1. Actual lead emissions estimates for the 2010 baseyear. Note, haul road emissions estimates are indicative of worst-case conditions. Due to rounding total emissions in lbs/year may not sum exactly as shown.

| Facility [ID]                           | Source Type | Emission Unit (ID) <sup>†</sup>         | Emission Point ID | Pb Emissions (tons/yr) | Pb Emissions (lb/yr) |        |   |
|-----------------------------------------|-------------|-----------------------------------------|-------------------|------------------------|----------------------|--------|---|
| Griffin Pipe (GP) [78-01-012]           | Point       | Cupola (EU-1)                           | EP-2**            | 0.7447                 | 1,489                |        |   |
|                                         |             | Magnesium Inoculation (EU-4)            |                   |                        |                      |        |   |
|                                         |             | Hot Iron Desulfurization (EU-2)         | EP-7A             |                        |                      |        |   |
|                                         |             | Uncaptured Magnesium Inoculation (EU-4) | EP-7B             |                        |                      |        |   |
|                                         |             | Small Diameter Casting (EU-6)           | EP-6A             |                        |                      | 0.0018 | 4 |
|                                         |             | Building Emissions                      | EP-6B             |                        |                      |        |   |
|                                         | Fugitive    | Large Diameter Casting (EU-29)          | EP-29             | 0.0018                 | 4                    |        |   |
|                                         |             |                                         | EP-29A            |                        |                      |        |   |
|                                         |             | Scrap Handling (EU-17)                  | FUG1              | 0.0043                 | 9                    |        |   |
|                                         |             | Haul Roads                              | n/a               | 0.0286                 | 57                   |        |   |
| <b>GP Total</b>                         |             |                                         |                   | <b>1.0382</b>          | <b>2,076</b>         |        |   |
| Alter Metal Recycling (AMS) [78-01-043] | Fugitive    | Haul Roads                              | n/a               | 0.7182                 | 1,436                |        |   |
| <b>AMS Total</b>                        |             |                                         |                   | <b>0.7182</b>          | <b>1,436</b>         |        |   |
| <b>Total</b>                            |             |                                         |                   | <b>1.7564</b>          | <b>3,513</b>         |        |   |

<sup>†</sup> For simplicity, all emission units are not always listed if an emission point is associated with more than one unit. This does not affect the lead emissions totals.

\*\* The Cupola Wet Scrubber Stack.

<sup>8</sup> One lb/yr was not used as a specific threshold but instead represents a potential screening level to eliminate sources with very small (inconsequential), but non-zero, lead emissions. For example, sources combusting fuel oil or natural gas (or other fuels) may report minute lead emissions due to trace quantities of lead present in the fuel.

#### 3.1. Griffin Pipe

Point source lead emissions from Griffin Pipe occur primarily from melting metal, a hot iron desulfurization process, a magnesium inoculation process, and metal casting. The melting process uses a cupola furnace that is charged with coke, scrap iron, scrap steel, and fluxes as raw materials. As the materials are heated, melted, and move through the casting process, lead content present in the scrap is released and vented through stacks and roof vents. The baseyear lead emissions from Griffin Pipe’s point sources were determined using information reviewed or calculated by the DNR. Data sources included stack test results, throughput information, or other facility-specific data. EPA’s online compilation of air pollution (AP) emissions factors in [AP-42](#) (Volume I, Fifth Edition) or industry-based emission factors were used only when no other information was available.

The haul road and cupola charging (scrap handling) processes generate fugitive emissions external to the buildings at Griffin Pipe. Lead present in the silt on facility haul roads is re-entrained by facility traffic. Smaller amounts of lead are emitted by handling scrap material before and during the cupola charging process. While minute quantities of lead can be found in other materials used as the facility, such as in cement applied to the cast pipe and the natural gas used to fire the annealing furnaces, these trace quantities are negligible and were not considered in the development of control measures.

#### 3.2. Alter Metal Recycling

Alter Metal Recycling is the other stationary facility within the nonattainment area with lead emissions contributing to monitored lead levels above the NAAQS. Inbound and outbound materials are transported primarily by truck to, from, and within Alter Metal Recycling. Haul road activities are the dominant source of lead emissions at Alter Metal Recycling. Other activities at this facility such as torch cutting and hammer mill operations are estimated to be negligible and were not included in the development of control measures.

#### 3.3. Haul Roads

The baseline haul road emissions estimates (for both facilities) provided in Table 3-1 likely represent worst-case conditions. The emission estimates are derived from the analysis of surface roadway conditions prior to any watering or sweeping of the haul roads. In reality, roadway fugitive dust suppression activities in use in 2010 at Griffin Pipe or Alter Metal Recycling would reduce haul road lead emissions. The effects of this caveat are not readily quantifiable and it is possible the baseyear haul road emission estimates overstate the true values. Details of the baseyear haul road emissions calculation at both Alter Metal Recycling and Griffin Pipe are provided in Appendix A.

#### 3.4. Other Sources

No other stationary sources within the nonattainment area are known to emit lead in quantities relevant to monitored lead values in the nonattainment area.<sup>9</sup> Onroad mobile sources are no longer associated with lead emissions. The latest tool for estimating emissions from onroad sources, the Motor Vehicle Emissions Simulator (MOVES2014) does not include lead as a pollutant. Similarly, lead is not included as a pollutant in the latest nonroad emissions model (NONROAD2008). The NONROAD model calculates emissions for all offroad sources except commercial marine, locomotives, and aircraft.

<sup>9</sup> Due to trace amounts of lead in many fossil fuels such as natural gas and fuel oil, small quantities can be emitted from various sources. For example, the 2011 NEI (version 1, September 30, 2013) had ~19.5 pounds of lead emitted within all of Pottawattamie County from sources within the EIS Sector “Fuel Comb - Industrial Boilers, ICES – Oil.” This value represents less than 1% of the total from Alter Metal Recycling and Griffin Pipe. Such sources have been screened from further review.

No commercial marine vehicles operate within the nonattainment area. While piston-engine aircraft may use leaded aviation fuel (commercial jet aviation aircraft do not use leaded fuel) no airports are located within the nonattainment area.

The most recent comprehensive triennial National Emissions Inventory (NEI) (2011 Version 1, released September 30, 2013) estimates lead emissions from locomotive activities for all of Pottawattamie county at 0.002936 tons per year (tpy) of lead (~5.87 lbs/year). Locomotive emissions are not pertinent to the development of control measures for the lead nonattainment area. No other lead sources within the nonattainment area have been identified or quantified.

#### 4. RACT/RACM

Section 172(c)(1) of Part D of the CAA requires that the nonattainment implementation plan “...provide for the implementation of all reasonably available control measures [RACM] as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology [RACT]) and shall provide for attainment of the national primary ambient air quality standards.”

Identification of lead RACM begins by identifying potential control measures for lead sources within the nonattainment area.<sup>10</sup> EPA’s March 2012 *Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions*, EPA-457/R-12-001, identifies factors that should then be considered in determining whether a control measure is RACM:

1. The economic feasibility of the control measure,
2. The capital costs, annualized cost, and cost effectiveness of the control measure; and
3. The extent of adoption of the control measure by state regulations.

Control measures may be excluded from further consideration if it can be shown, both individually and as a group, that the emissions from the affected sources are insignificant (73 FR 66964 p. 67036). The remaining measures should be adopted as RACM if they are economically viable and technically feasible.

EPA’s historic description of RACT is the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (73 FR 66964 p. 67037). A RACT definition is provided in 40 CFR 51.100(o):

*Reasonably available control technology (RACT)* means devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account:

- (1) The necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;
- (2) The social, environmental, and economic impact of such controls.

EPA is recommending a threshold for RACT analyses such that at least all stationary sources emitting 0.5 tpy or more of lead should undergo a RACT review and that smaller sources should also be included if necessary to demonstrate attainment (73 FR 66964 p. 67038). RACT applies to existing sources of lead in the nonattainment area and encompasses stack emissions, fugitive emissions (such as haul roads), and industrial process fugitive emissions (73 FR 66964 p. 67037). The only two facilities with relevant lead emissions within the nonattainment area are Griffin Pipe and Alter Metal Recycling. In the 2010 baseyear both facilities had estimated baseline actual emissions greater than EPA’s suggested 0.5 tpy RACT threshold.

From the above discussion it may appear a RACT/RACM determination requires a complex multifaceted analysis involving costs and other factors. In practice, the RACT/RACM evaluation is generally less complex. RACT/RACM determinations are often simply the emission limits or other control measures necessary to achieve the NAAQS. The use of common, simple, or widely available control measures can effectively negate the need for an in-depth analysis, particularly when such techniques are prerequisites for attainment of the NAAQS.

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<sup>10</sup> See 73 FR 66964 (November 12, 2008), specifically page 67036.

#### 4.1. Griffin Pipe

Griffin Pipe is the largest lead source within the nonattainment area according to the 2010 baseline actual emissions estimates. While the facility idled melting operations on May 3, 2014, Griffin Pipe does not consider the facility permanently shut down and the facility's potential emissions remain unchanged. Sources at the facility must undergo a RACT/RACM review and new emissions limits must be established to ensure the lead NAAQS is attained and maintained when Griffin Pipe resumes operations. A discussion of the RACT/RACM analysis follows the summary in Table 4-1 and the depiction in Figure 4-1 of the point source locations at Griffin Pipe.

Table 4-1. Summary of RACT/RACM conclusions for Griffin Pipe.

| Emission Point ID | Emission Point Description                                                       | Associated Emission Units (Emission Unit ID) <sup>a,b</sup>     | RACT/RACM Summary                                                                              |
|-------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| EP-2              | Cupola Wet Scrubber Stack (point source)                                         | Cupola (EU-1)<br>Magnesium Inoculation (EU-4)                   | Wet scrubber and stack EP-2 no longer exist                                                    |
| EP-2A             | Cupola Baghouse Stack (point source)                                             | Cupola (EU-1)                                                   | This replaces the cupola wet scrubber stack. RACT limit based on BACT from PSD project 10-030. |
| EP-3              | Hot Iron Desulfurization and Magnesium Inoculation Baghouse Stack (point source) | Hot Iron Desulfurization (EU-2)<br>Magnesium Inoculation (EU-4) | New baghouse from PSD project (10-030). Lower emission limits added to meet Pb NAAQS.          |
| EP-7A             | Rooftop point source                                                             | Magnesium Inoculation-Uncaptured (EU-4)                         | New Pb emission limits to meet NAAQS.                                                          |
| EP-7B             | Rooftop point source                                                             | Desulfurization-Uncaptured (EU-2)                               | New Pb emission limits to meet NAAQS.                                                          |
| EP-6A             | Rooftop point source                                                             | Small Diameter Casting (EU-6)                                   | New Pb emission limit to meet NAAQS.                                                           |
| EP-6B             | Rooftop point source                                                             | Building Emissions                                              | New Pb emission limits to meet NAAQS.                                                          |
| EP-29             | Rooftop point source                                                             | Large Diameter Casting (EU-29)                                  | New Pb emission limit to meet NAAQS.                                                           |
| EP-29A            | Rooftop point source                                                             |                                                                 |                                                                                                |
| FUG1              | Fugitives                                                                        | Cupola Charge Handling (EU-17)                                  | Work practices to minimize emissions.                                                          |
| Haul Roads        | Fugitives                                                                        | Roadway fugitive emissions                                      | Sweeping of haul roads to reduce fugitive dust emissions.                                      |

<sup>a</sup> In the 2010 baseyear, magnesium inoculation and cupola emissions were controlled by the wet scrubber and the wet scrubber did not control hot-iron desulfurization emissions. In 2011 two baghouses were added, one to control cupola emissions and a second to control both the magnesium inoculation and hot iron desulfurization emissions. Uncaptured emissions still occur because the magnesium inoculation and hot-iron desulfurization capture equipment is not 100% effective.

<sup>b</sup> For simplicity, all emission units are not always listed if an emission point is associated with more than one unit, this does not affect the RACT/RACM determination.



Figure 4-1. Approximate locations of lead emitting point sources at Griffin Pipe. EP-2 no longer exists.

#### Cupola

In the 2010 baseyear the majority of the facility's emissions, approximately 72%, were attributed to the cupola (and the magnesium inoculation process). EPA's March 2012 *Guide to Developing Reasonable Available Control Measures (RACT) for Controlling Lead Emissions* (EPA-457/R-12-001) suggests there is substantial support for adding control devices (such as filters) to control cupola emissions at iron foundries.

The cupola was constructed prior to September 23, 1970, and was initially grandfathered for the purposes of construction permitting. To reduce cupola emissions a wet scrubber system was installed in 1971. Process modifications made in 1999 expanded the use of the wet scrubber system to control emissions from the plunging (magnesium inoculation) process, which were previously uncontrolled. Before 1971 emissions from the cupola were uncontrolled.

On December 7, 2010, the Iowa DNR issued permits to Griffin Pipe for a project (10-030) that was significant for lead under the PSD program. The PSD regulations and associated permits minimize lead emissions by requiring the installation of the top-level control that satisfies the Best Available Control Technology (BACT) determination. The PSD permit for the cupola (permit number 10-A-270-P) required the addition of a baghouse and the implementation of a scrap management plan to reduce lead emissions. The scrap management plan required that lead containing components of scrap such as batteries, battery cables and wheel weights be removed, to the extent practicable, prior to being

charged (loaded) in the cupola. The DNR concludes a scrap management plan, baghouse, and the associated emissions limits satisfy RACT/RACM for the cupola.

#### Desulfurization and Magnesium Inoculation

In the baseyear approximately 25% of Griffin Pipe's estimated actual lead emissions were associated with hot-iron desulfurization and uncaptured magnesium inoculation emissions. In early 2011 Griffin Pipe started operating the new cupola baghouse. At the same time, a second baghouse began operation to control emissions from the hot-iron desulfurization and magnesium inoculation processes. The addition of this baghouse was also required as part of the PSD project (10-030) mentioned above. The desulfurization and magnesium inoculation baghouse is separate from the cupola baghouse but otherwise comparable. The installation and operation of the baghouse essentially satisfies RACT/RACM requirements for the desulfurization and magnesium inoculation processes. For purposes of the control strategy, new emission rates were specified to ensure attainment and maintenance of the NAAQS, including limits on roof vents EP-7A and EP-7B.

#### Haul Roads, Casting, Scrap Handling, and Building Emissions

The remaining baseyear lead emissions, which constitute only a few percent of the total, are attributed to haul roads, the large & small diameter casting processes, building emissions, and cupola charge handling. Despite a low emissions total the haul roads require control to provide for modeled attainment in all areas considered ambient air. Sweeping of the haul roads to control at levels of 90% or more compared to baseline conditions is considered RACM for the haul roads. All travelled roadways at Griffin Pipe are paved and are subject to sweeping requirements to minimize lead-containing fugitive dust emissions. Actual lead emissions from casting and scrap handling activities are expected to be relatively low, but the potential of the sources to emit lead were not previously expressly limited. Emissions limits were developed for attainment of the lead NAAQS in the dispersion modeling demonstration. The new limits are necessary for attainment demonstration purposes and are considered RACT/RACM.

#### 4.2. Alter Metal Recycling

Reducing lead emissions from the haul roads is the only reasonable control measure identified for Alter Metal Recycling. No other lead emissions at Alter Metal Recycling have been identified for RACT/RACM review. Control of the facility haul roads is necessary to demonstrate modeled attainment of the lead NAAQS in ambient air. The facility is required to sweep all paved roadways to achieve a 95% reduction in fugitive dust emissions compared to the baseline, as summarized in Table 4-2.

Table 4-2. Summary of RACT/RACM conclusions for Alter Metal Recycling.

| Emission Point ID | Emission Point Description | Associated Emissions Unit(s) (Emission Unit ID) <sup>a</sup> | RACT/RACM Summary                                                |
|-------------------|----------------------------|--------------------------------------------------------------|------------------------------------------------------------------|
| Fugitives         | Haul Roads                 | Fugitive Haul Road Emissions                                 | Sweeping of haul roads to reduce fugitive dust emissions by 95%. |

## 5. Control Strategy

### 5.1. Griffin Pipe

The control strategy to attain the lead NAAQS builds upon the RACT/RACM analysis and incorporates conditions relevant to the idling of plant operations. While actual lead emissions at the facility during the idling are essentially zero, potential emissions remain unchanged unless new limits or other control measures are established. The DNR and Griffin Pipe voluntarily entered into an Administrative Consent Order (ACO) containing enforceable control measures designed to ensure the lead NAAQS is attained and maintained when Griffin Pipe resumes operations. The ACO defines two independent control strategies, designated Option A and Option B. Griffin Pipe must implement a strategy but may choose which strategy to implement. The ACO and its attachments contain the enforceable requirements, are submitted for inclusion in the SIP, and are found in Appendix B. Both strategies are summarized below.

#### Control Strategy Option A

The control strategy designated Option A contains, for example, new lead emissions limits, haul road control measures, and restrictions on the hours of operations. Requirements include:

- Limiting scrap melting operations to 1,250 hours in any 3-month rolling period.
- Sweeping/cleaning the haul roads to achieve a 95% reduction in Pb emissions.
- Shipping bulk materials and product only from 7 am to 5 pm daily.
- Implementing "good housekeeping" or best management practices (BMP), such as posting speed limit signs and cleaning in appropriate situations to minimize fugitive emissions.
- Meeting new lead emission limits added to existing sources, as shown in Table 5-1.

Table 5-1. Summary of Pb source emission limits for Griffin Pipe under control strategy Option A.

| Source Description (Unit ID)                | Emission Point ID | Pb Limit (lb/hr) | Control Equipment |
|---------------------------------------------|-------------------|------------------|-------------------|
| Cupola (EU-1)                               | EP-2A             | 0.282            | Baghouse (CE-10)  |
| Desulfurization (EU-2)                      |                   |                  |                   |
| Bull Ladle (EU-3)                           | EP-3              | 0.0018           | Baghouse (CE-11)  |
| Magnesium Inoculation (EU-4)                |                   |                  |                   |
| Magnesium Inoculation-Uncaptured (EU-4)     | EP-7A             | 0.0026           | None              |
| Ladle Preheat-Uncaptured (EU-19)            |                   |                  |                   |
| Desulfurization-Uncaptured (EU-2)           | EP-7B             | 0.0372           | None              |
| Bull Ladle-Uncaptured (EU-3)                |                   |                  |                   |
| Small Diameter Casting (EU-6)               |                   |                  |                   |
| Small Diameter Casting (EU-6)               | EP-6A             | 0.0043           | None              |
| Building Emissions                          | EP-6B             | 0.0025           | None              |
| Large Diameter Casting (EU-29) <sup>a</sup> | EP-29 & EP-29A    | 0.0025           | None              |
| Cupola Charge Handling (EU-17)              | FUG1              | 0.00143          | None              |
| Traffic Pathways                            | N/A               | <sup>b</sup>     | Sweeping          |

<sup>a</sup> The large-diameter casting limits are bubbled (cumulative), covering both EP-29 and EP-29A simultaneously.

<sup>b</sup> The lead limit is established at 0.002 tons of lead per rolling 3-month total; that correlates to a lead silt content of 0.00016 g/m<sup>2</sup> and maximum potential operation. The lead limit is based on 95% reduction over baseline lead levels. The haul road surface total silt loading or lead silt loading shall not exceed 0.64 g/m<sup>2</sup> or 0.00016 g/m<sup>2</sup>, respectively, based on a 3-month rolling average.

### Control Strategy Option B

The control strategy designated option B requires the installation of a baghouse to control emissions from roof vent EP-7B and tightens the emission limit for EP-7B by nearly a factor of 15 compared to Option A. The new baghouse is located approximately 35 feet north of EP-3, as indicated in Figure 5-1. The restrictions on the hours of operations are eliminated and offset by the addition of the baghouse. The frequency of sweeping is also adjusted based on similar considerations. Requirements include:

- Installing a new baghouse to control emissions from EP-7B and meeting a lead limit of 0.0025 lb/hr (see Table 5-2).
- Sweeping/cleaning the haul roads to achieve a 90% reduction in Pb emissions.
- Implementing “good housekeeping” or BMP, such as posting speed limit signs and cleaning in appropriate situations to minimize fugitive emissions.
- Meeting new lead emission limits added to existing sources, as shown in Table 5-2.

Table 5-2. Summary of Pb source emission limits for Griffin Pipe under control strategy Option B.

| Source Description (Unit ID)                                                                                     | Emission Point ID | Limit (lb/hr) | Control Equipment |
|------------------------------------------------------------------------------------------------------------------|-------------------|---------------|-------------------|
| Cupola (EU-1)                                                                                                    | EP-2A             | 0.282         | Baghouse (CE-10)  |
| Desulfurization (EU-2)                                                                                           | EP-3              | 0.02          | Baghouse (CE-11)  |
| Bull Ladle (EU-3)                                                                                                |                   |               |                   |
| Magnesium Inoculation (EU-4)                                                                                     |                   |               |                   |
| Magnesium Inoculation-Uncaptured (EU-4)<br>Ladle Preheat-Uncaptured (EU-19)                                      | EP-7A             | 0.0075        | None              |
| Desulfurization-Secondary Capture (EU-2)<br>Bull Ladle-Secondary Capture (EU-3)<br>Small Diameter Casting (EU-6) | EP-7B             | 0.0025        | Baghouse (CE-12)  |
| Small Diameter Casting (EU-6)                                                                                    | EP-6A             | 0.0043        | None              |
| Building Emissions                                                                                               | EP-6B             | 0.0015        | None              |
| Large Diameter Casting (EU-29) <sup>a</sup>                                                                      | EP-29 & EP-29A    | 0.0025        | None              |
| Cupola Charge Handling (EU-17)                                                                                   | FUG1              | 0.00143       | None              |
| Traffic Pathways                                                                                                 | N/A               | <sup>b</sup>  | Sweeping          |

<sup>a</sup> The large diameter casting limits are bubbled (cumulative), covering both EP-29 and EP-29A.

<sup>b</sup> The lead limit is established at 0.004 tons of lead per rolling 3-month total; that correlates to a lead silt content of 0.00032 g/m<sup>2</sup> and maximum potential operation. The lead limit is based on 90% reduction over baseline lead levels. The haul road surface total silt loading or lead silt loading shall not exceed 1.28 g/m<sup>2</sup> or 0.00032 g/m<sup>2</sup>, respectively, based on a 3-month rolling average.

### Standard Operating Procedures

Both of Griffin Pipe’s control strategies (Option A and Option B) require the implementation of work practice standards as specified in Standard Operating Procedures (SOPs) Melt180CB and Melt220CB. Melt180CB SOP prescribes methods to minimize emissions from cupola charge handling activities and Melt220CB SOP implements a scrap management plan designed to minimize the amount of lead in the scrap. These SOPs are provided in their entirety in section B-1 of Appendix B. While not all aspects of these SOPs pertain to lead emissions or were relied upon as part of the attainment strategy modeling, they have been included in their entirety for simplicity and completeness purposes. Only those portions relevant to lead emissions are applicable to the SIP.



Figure 5-1. Depiction of the existing point sources at Griffin Pipe and the new location of source EP-7B (baghouse stack) under control strategy Option B.

### 5.2. Alter Metal Recycling

The control strategy requires Alter Metal Recycling to reduce their haul road emissions by sweeping paved roads. Unpaved roads must be paved or their use discontinued. Material shipments are limited to 946,000 tons per rolling 12-month period. Additional review of the control strategy is provided below. The legally enforceable requirements are contained in construction permit number 14-A-521, submitted for inclusion in the SIP, and located in Appendix C.

- New limits restricting fugitive lead emissions from haul road traffic are based on a 95% reduction from baseline levels. Emission reductions are accomplished by sweeping. The lead limit is established at 0.01 tons of lead per rolling 3-month average; that correlates to a lead silt content of 0.00281 g/m<sup>2</sup> and maximum potential operation. A haul road surface silt loading content of 2.7 g/m<sup>2</sup> has been established as a surrogate for total lead silt content.
- All haul roads at Alter Metal Recycling must be paved. The facility shall complete the paving of unpaved haul road segments 7, 14, 15, and 16 by October 31, 2015, and stop using unpaved haul road segment 17 by the same date. A depiction of these unpaved road segments is provided in Figure 5-2.
- The shipping of inbound and outbound materials is restricted to between the hours of 5 am to 8 pm Monday through Friday, and 8 am to 12 pm on Saturday, and cannot exceed 946,000 tons of material per rolling 12-month period. Internal transfers are limited to Monday-Friday.

- Alter Metal Recycling must implement “good housekeeping” or BMP to minimize fugitive emissions, such as posting speed limit signs and cleaning in appropriate situations.

The control measures for Alter Metal Recycling also account for changes since the 2010 baseyear in haul road locations, road segment lengths, and new routes being implemented with the addition of a non-ferrous metal recovery operation at Alter Metal Recycling, discussed in Appendix D.



Figure 5-2. Approximate location of the unpaved road segments in the 2010 baseyear at Alter Metal Recycling. Segment 14 was originally paved but was treated as unpaved due to surface deterioration.

### 5.3. Implementation

The proposed RACT/RACM measures for the Council Bluffs lead nonattainment area and the associated control strategies are implemented through legally enforceable mechanisms. Griffin Pipe entered into an ACO (number 2015-AQ-??) with the DNR, permanently reducing emissions while the facility is operating. The ACO was signed on <DATE> and requires control measures be implemented when the facility resumes operation. The ACO is submitted as part of this SIP and is provided in Appendix B.

Construction permit 14-A-521 was issued to Alter Metal Recycling on September 2, 2014. Mandatory implementation of the haul road sweeping requirements became effective 7 days later, on September 9, 2014. The construction permit is a legally enforceable mechanism, results in permanent lead emissions reductions, and is submitted as part of this SIP in Appendix C.

## 6. Attainment Demonstration

The control measures developed for Griffin Pipe and Alter Metal Recycling will eliminate violations of the 2008 lead NAAQS according to the dispersion modeling results. The dispersion modeling analysis used the current version of EPA’s preferred refined dispersion model, the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD, dated 14134). AERMOD was run in the default regulatory mode.

### 6.1. Source Characteristics

Sources at Griffin Pipe were modeled as point sources or volume sources. Potential emission rates for the point sources were developed from stack test results, process information, engineering assessment, and evaluation of the levels necessary to achieve the NAAQS through the RACT/RACM review. The stack parameters and maximum allowable hourly lead emission rates from point sources at Griffin Pipe are shown in Table 6-1, Table 6-2, and Table 6-3. Table 6-1 includes those point sources with identical characteristics (notwithstanding restrictions on hours of operation) in control strategy Option A and Option B. Table 6-2 and Table 6-3 include the point source parameters which differ under control strategy Option A and Option B, respectively. All stacks are modeled with an unobstructed vertical discharge. Three volume sources were modeled to account for cupola charge handling emissions at Griffin Pipe. Cupola charging emissions are the same in both control strategy options and are shown in Table 6-4.

The haul roads at Alter Metal Recycling and Griffin Pipe Recycling were characterized as volume sources consistent with EPA’s Haul Road Workgroup Final Report dated December 6, 2011. This includes appropriate adjustments of the volume source location and/or initial horizontal dimension (sigma y) for nearby receptors. Figure 6-1 indicates the locations of downwash structures (blue rectangles), point sources (light blue dots), and volume sources (red dots) in the model. Figure 6-2 and Figure 6-3 depict the locations of the haul roads sources. Modifications to the facility haul roads incurred due to the addition of a process, referred to as the ZC Plant (to allow the facility to recover non-ferrous materials from shredder fluff previously landfilled or otherwise disposed as waste) are incorporated into the modeling layout and described in Appendix D.

A detailed accounting of the haul road emissions at Griffin Pipe and Alter Metal Recycling is not suited for reproduction in this document due to complexity from temporal variation and the number of haul road segments. In summary, the lead emissions from the haul roads are distributed spatially (by road segment) and in time (by day of week and by hour of day) according to the usage schedule of the haul roads and any applicable restrictions in the control strategies.<sup>11</sup> The haul road emission rates also account for several road segments with shared use by Griffin Pipe and Alter Metal Recycling.

<sup>11</sup> Temporal variations in the haul road emission rates at Alter Metal Recycling occur, for example, across the hours of the day because the inbound/outbound shipping of material is restricted to between 5 am and 8 pm (Monday through Friday; 9 am to noon on Saturdays). Day of week variations occur, for example, because internal transfers are allowed only Monday-Friday while inbound/outbound material may be shipped on Monday-Saturday.

Table 6-1. Hourly emission limits and stack parameters for point sources at Griffin Pipe with identical characteristics in control strategy options A and B.

| AERMOD Source ID | Brief Source Description | Emission rate (Pb) (lb/hr) | Stack Height (ft) | Gas exit temp (°F) | Gas exit velocity (ft/s) | Effective Diameter (inches) |
|------------------|--------------------------|----------------------------|-------------------|--------------------|--------------------------|-----------------------------|
| GEP2A            | Cupola Baghouse          | 0.282                      | 100               | 295                | 52.4                     | 80                          |
| GEP6A            | Small Diameter Casting   | 0.0043                     | 49                | 92                 | 49.6                     | 80                          |
| GEP29            | Large Diameter Casting   | 0.0025*                    | 48                | 143                | 25.2                     | 81.24                       |
| GEP29A           | Large Diameter Casting   |                            | 48                | 128                | 25.0                     | 81.24                       |

\* Total emissions from both GEP29 and GEP29A (large diameter casting) cannot exceed 0.0025 lb/hr.

Table 6-2. Hourly emission limits and stack parameters for point sources at Griffin Pipe under control strategy Option A.

| AERMOD Source ID | Brief Source Description         | Emission rate (Pb) (lb/hr) | Stack Height (ft) | Gas exit temp (°F) | Gas exit velocity (ft/s) | Effective Diameter (inches) |
|------------------|----------------------------------|----------------------------|-------------------|--------------------|--------------------------|-----------------------------|
| GEP3             | Desulf./Inoc. Baghouse           | 0.0018                     | 100               | 149                | 36.1                     | 74                          |
| GEP7A            | Magnesium Inoculation-Uncaptured | 0.0026                     | 49                | 97                 | 22.3                     | 122.4                       |
| GEP7B            | Desulfurization-Uncaptured       | 0.0372                     | 49                | 110                | 22.6                     | 122.4                       |
| GEP6B            | Building Emissions               | 0.0025                     | 49                | 92                 | 49.6                     | 80                          |

Table 6-3. Hourly emission limits and stack parameters for point sources at Griffin Pipe under control strategy Option B.

| AERMOD Source ID | Brief Source Description                          | Emission rate (Pb) (lb/hr) | Stack Height (ft) | Gas exit temp (°F) | Gas exit velocity (ft/s) | Effective Diameter (inches) |
|------------------|---------------------------------------------------|----------------------------|-------------------|--------------------|--------------------------|-----------------------------|
| GEP3             | Desulf./Inoc. Baghouse                            | 0.02                       | 100               | 149                | 36.1                     | 74                          |
| GEP7A            | Magnesium Inoculation-Uncaptured                  | 0.0075                     | 49                | 97                 | 22.3                     | 122.4                       |
| GEP7B            | Desulfurization-Secondary Capture (New Baghouse)* | 0.0025                     | 100               | 110                | 39.8                     | 96                          |
| GEP6B            | Building Emissions                                | 0.0015                     | 49                | 92                 | 49.6                     | 80                          |

\* The new baghouse to control GEP7B is located 35 feet north of GEP3.

Table 6-4. Volume source parameters at Griffin Pipe.\*

| AERMOD Source ID | Source Description     | Emission rate (Pb) (lb/hr) | Release height (ft) | Initial lateral dimension (m) | Initial vertical dimension (ft) |
|------------------|------------------------|----------------------------|---------------------|-------------------------------|---------------------------------|
| FUG1B_W          | Cupola charge handling | 0.000477                   | 36                  | 7.25                          | 33.5                            |
| FUG1B            | Cupola charge handling | 0.000477                   | 36                  | 7.25                          | 33.5                            |
| FUG1B_E          | Cupola charge handling | 0.000477                   | 36                  | 4.27                          | 33.5                            |

\* For brevity, Griffin Pipe haul road sources have been excluded from this table.

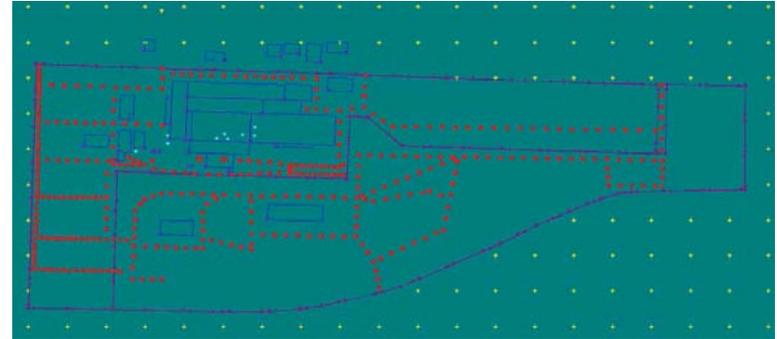


Figure 6-1. Model layout for Griffin Pipe and Alter Metal Recycling in the control strategy modeling.



Figure 6-2. Griffin Pipe roadway segments.



Figure 6-3. Alter Metal Recycling roadway segments (incorporates changes due to the ZC Plant).

## 6.2. Receptor Grids

The two facilities are adjacent to each other and share a common boundary between them, as shown previously in Figure 1-4. The dispersion modeling evaluated total ambient impact of lead emissions from Griffin Pipe and Alter Metal Recycling combined, as well as their impacts on each other's property to ensure that neither facility is causing NAAQS violations on their neighbor's property.

Property owned by a facility but not secured to prevent public access is considered ambient air and subject to modeling. The identification of facility boundaries for purposes of receptor placement must therefore consider if public access is somehow restricted. Property boundaries at Griffin Pipe are secured by fencing and augmented by movable gates at driveways into the facility. Historically Griffin Pipe has employed 24-hour guard service and video surveillance of the property as additional security measures. Because current conditions sufficiently preclude public access the ACO with Griffin Pipe contains simple language pertaining to this topic. Since not all property boundaries at Alter Metal Recycling are fenced their construction permit (14-A-521) is more specific and requires the posting of signs warning of restricted access and the use of surveillance to secure unfenced boundaries.

To determine total ambient impact, the two contiguous facilities were treated as a single entity with one encompassing property boundary (as shown by the purple lines in Figure 6-1). Receptors were spaced 50 m apart on this property boundary. A Cartesian grid of discrete receptors extends out 1.5 km from the boundary. For the first 0.5 km the receptors are spaced at 50 m intervals and from 0.5 to 1.5 km the receptors are spaced at 100 m intervals. The receptor grid covers a combined area of 14 km<sup>2</sup> (3.5 km x 4 km) surrounding Griffin Pipe and Alter Metal Recycling. To determine the facilities' impacts on each other's property, receptors at 50 m intervals were placed along the common boundary between the two facilities and at 50 m intervals on the property of the facility.

## 6.3. Terrain Elevations

The terrain, source, and building elevations were obtained from the National Elevation Dataset (NED) for Pottawattamie County, Iowa. The domain used for importation of AERMAP data encompasses all terrain that may be at or above a 10% slope from each receptor.

## 6.4. Building Downwash

All structures potentially contributing to plume downwash were included in the model. Downwash was evaluated using the latest version of the Building Profile Input Program (BPIP-PRIME) after determining the source and building base elevations using the latest version of AERMAP.

## 6.5. Meteorological Data

The surface and upper air meteorological data are from the Omaha airport (KOMA) for years 2008 – 2012. The base elevation is 299 m. These data are considered representative of the meteorological conditions in the area of Griffin Pipe and Alter Metal Recycling.

## 6.6. Background Value

An analysis was conducted of the ambient lead concentrations measured during the time period November 2009 through 2012 at the monitor located near the intersection of 8<sup>th</sup> Avenue and 27<sup>th</sup> Street in Council Bluffs. The review excluded all concentrations measured on days with an hourly wind direction with a southerly (greater than 90 degrees and less than 270 degrees) component, in an attempt to screen out concentrations potentially influenced by sources at Griffin Pipe or Alter Metal Recycling. Based on EPA's comments and recommendations the background level for lead is assumed to be 0.01 µg/m<sup>3</sup> for the nonattainment SIP modeling.

## 6.7. Results

Lead NAAQS compliance was evaluated for five cases. The first two cases evaluated cumulative impacts of lead emissions from both facilities on ambient air. One simulation was required for each of Griffin Pipe's two control strategies. Potential (permitted/allowable) emissions from Alter Metal Recycling are identical in both scenarios. The three remaining simulations included two runs to assess Griffin Pipe's lead impacts for both control strategies on Alter Metal Recycling's property and a final simulation to assess the lead impacts from Alter Metal Recycling on Griffin Pipe's property. All five simulations modeled compliance with the lead NAAQS.

Post file analyses were conducted to determine the paired spatial and temporal contributions from each facility at the worse-case receptor location. The AERMOD results were post-processed using the latest version of EPA's executable file "leadpost\_13262.exe." When post-processing involved multiple source groups, an equivalent DNR spreadsheet tool was used. The post-processed results were compared with the lead NAAQS of 0.15 µg/m<sup>3</sup>.

Table 6-5 and Table 6-6 show that the results of the two cumulative control strategy modeling runs achieve attainment with the lead NAAQS. The results for Griffin Pipe's Option A strategy are provided in Table 6-5 and the results for the Option B strategy follow in Table 6-6. The modeled predictions are apportioned by source type for the receptor in ambient air with the highest modeled concentration. No NAAQS violations are predicted by the dispersion modeling and each control strategy is expected to yield attainment with the 2008 lead NAAQS. Results for the remaining three cases involving individual facility impacts upon each other all showed attainment of the lead NAAQS. The dispersion modeling data was transmitted to EPA Region 7 for review and approval.

Table 6-5. Dispersion modeling results showing the receptor in ambient air with the highest modeled concentration attains the lead NAAQS using Griffin Pipe's Option A control strategy. All concentrations are in  $\mu\text{g}/\text{m}^3$  calculated using EPA's Leadpost processor or similar techniques.

| Location                | Total Impact* | Alter Metal Recycling        | Griffin Pipe    |            |                |                |                 |                                    |                          |                        |
|-------------------------|---------------|------------------------------|-----------------|------------|----------------|----------------|-----------------|------------------------------------|--------------------------|------------------------|
|                         |               | Entire Facility (Haul Roads) | Entire Facility | Haul Roads | Cupola BH (2A) | Desulf. BH (3) | Vents 7A and 7B | Small casting & Building (6A & 6B) | Large casting (29 & 29A) | Charge handling (FUG1) |
| X= 258192<br>Y= 4570766 | 0.149         | 0.066                        | 0.073           | 0.007      | 0.000          | 0.000          | 0.045           | 0.008                              | 0.003                    | 0.010                  |

\* Total impact includes a background concentration of  $0.01 \mu\text{g}/\text{m}^3$ .  
BH=Baghouse

Table 6-6. Dispersion modeling results showing the receptor in ambient air with the highest modeled concentration attains the lead NAAQS using Griffin Pipe's Option B control strategy. All concentrations are in  $\mu\text{g}/\text{m}^3$  calculated using EPA's Leadpost processor or similar techniques.

| Location                | Total Impact* | Alter Metal Recycling        | Griffin Pipe    |            |                |                |                       |                                    |                          |                        |
|-------------------------|---------------|------------------------------|-----------------|------------|----------------|----------------|-----------------------|------------------------------------|--------------------------|------------------------|
|                         |               | Entire Facility (Haul Roads) | Entire Facility | Haul Roads | Cupola BH (2A) | Desulf. BH (3) | Vent 7A and New BH 7B | Small casting & Building (6A & 6B) | Large casting (29 & 29A) | Charge handling (FUG1) |
| X= 258182<br>Y= 4570767 | 0.149         | 0.069                        | 0.070           | 0.023      | 0.000          | 0.001          | 0.018                 | 0.010                              | 0.005                    | 0.014                  |

\* Total impact includes a background concentration of  $0.01 \mu\text{g}/\text{m}^3$ . Due to rounding the numbers may not sum exactly as shown.  
BH=Baghouse

## 7. Reasonable Further Progress

Section 172(c)(2) of the CAA requires nonattainment plans include provisions addressing reasonable further progress (RFP). The CAA defines RFP in Section 171 as "such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date."

EPA recognizes that achieving generally linear progress can be difficult or impossible with a small number of sources. According to the discussion in the preamble of the 2008 lead NAAQS revision (73 FR 66964, November 12, 2008, see pages 67038-67039), the RFP requirements for lead nonattainment "should be met by 'adherence to an ambitious compliance schedule' which is expected to periodically yield significant emission reductions, and as appropriate, linear progress."

In January of 2011 Griffin Pipe began operation of two new baghouses to control lead emissions from the cupola and the desulfurization and magnesium inoculation processes. Actual lead emissions from Griffin Pipe are expected to be essentially zero when the facility is idle but this is not used to meet RFP requirements. As of September 9, 2014, Alter Metal Recycling is required to implement the haul road sweeping measures engineered to reduce approximately 95% of their roadway fugitive lead emissions.

A timeline of the recent and anticipated lead emissions from the facilities is provided in Table 7-1. The RFP requirements in the Council Bluffs lead nonattainment area are met by a combination of early lead reductions associated with the PSD permits issued to Griffin Pipe, the expeditious implementation of control measures at Alter Metal Recycling, and Griffin Pipe's requirement to implement control measures when the facility resumes operations.

Table 7-1. Summary of emissions evaluations and components satisfying RFP.

| Facility              | Actual Annual Emissions Baseyear – 2010 (tpy)                                                                                                                                             | Actual Annual Emissions 2012 (tpy) | Control Measure Reductions & Timeline                                                                |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------|
| Griffin Pipe          | 1.0382                                                                                                                                                                                    | 0.070                              | Control measures implemented when Griffin Pipe resumes operations.                                   |
| Alter Metal Recycling | 0.7182<br>(The inter-annual variability in haul road emissions prior to the implementation of controls is not readily calculable, may be negligible, and needs no further consideration.) |                                    | Control measures reduce Pb emissions by 95% from baseline. Reductions required by September 9, 2014. |

## 8. Contingency Measures

To comply with CAA §172(c)(9) the DNR developed contingency measures which can be implemented quickly by Griffin Pipe and Alter Metal Recycling if either the applicable attainment date or RFP<sup>12</sup> requirements are not met. The contingency measures for both facilities are similar and can take effect promptly following a simple notification process.

The contingency measures require each facility to essentially double their haul road sweeping/cleaning frequency within seven days after notification by the DNR that a monitored exceedance of the lead NAAQS occurred. Each facility must also submit sweeping data to the DNR and continue the increased cleaning/sweeping frequency until otherwise notified.

If after three months of increased sweeping frequency another NAAQS violation occurs, then each facility is required to submit an emissions evaluation meeting the criteria and timeline specified by the DNR.

For Griffin Pipe the contingency requirements are enforceable through the ACO. Attachment A and Attachment B of the ACO contain slightly different language to tailor the frequency of increased sweeping to the respective control strategy. The contingency measures for Alter Metal Recycling are in place and enforceable through their construction permit.

Additionally, if contingency measures are triggered the DNR may request or conduct new or supplemental reviews of lead emissions from sources and activities affecting the nonattainment area. This review may require data collection activities and a reexamination of previous assumptions or conclusions.

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<sup>12</sup> Early lead reductions at Griffin Pipe from the addition of the baghouses and the timely compliance schedules in the control strategy satisfy RFP requirements.

## 9. Attainment Date

The effective date for the Council Bluffs lead nonattainment area was December 31, 2011. The CAA requires that the area achieve the lead standards as expeditiously as practicable and no later than five years from the nonattainment designation. Lead nonattainment areas are not eligible for extensions of the attainment date.<sup>13</sup>

Significant lead reductions occurred shortly after the area was designated. These reductions alone were not sufficient to achieve attainment. Three years of 3-month rolling averages below the 0.15 µg/m<sup>3</sup> standard are required for attainment purposes. Additional lead emissions reductions are being implemented as expeditiously as practicable. The state is identifying December 31, 2016, as the attainment date.

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<sup>13</sup> A five-year maximum attainment timeline is specified in CAA §192 and therefore the use of attainment date extensions provisions provided in §172(a)(C) are prohibited by §172(a)(D).

## 10. Additional Nonattainment SIP Provisions

Three remaining CAA Section 172(c) nonattainment requirements not addressed above are discussed in this chapter.

### 10.1. Identification & Quantification of Emissions

According to CAA §172(4) the SIP must identify and quantify the emissions which will be allowed from the construction and operation of major new or modified stationary sources in the area. The state must demonstrate that such emissions will be consistent with RFP requirements and will not interfere with attainment of the lead NAAQS. These requirements are met by Iowa's preconstruction permitting program and implementation of nonattainment new source rules in 567 – Iowa Administrative Code (IAC) 31.1, 31.3 – 31.10.

### 10.2. Nonattainment New Source Review

Section 172(c)(5) of the CAA refers to permits for new or modified major sources located within the nonattainment area. A special permitting process applies to such sources, referred to as a nonattainment new source review (NA NSR) program. NA NSR is mandated by CAA §173 and a SIP approved NA NSR program must meet the minimum criteria defined in 40 CFR 51.165. On May 15, 2014 (79 FR 27763) EPA approved into Iowa's SIP the NA NSR regulations in 567 – IAC 33. The modified administrative rules in Chapter 33 became effective on January 15, 2015, as published on December 11, 2013, in the Iowa Administrative Bulletin Volume XXXVI Number 12, pages 1455-1456.

### 10.3. CAA §110(a)(2) Requirements

Section 172(c)(7) of the CAA requires nonattainment SIPs to meet the applicable provisions of CAA §110(a)(2). While the provisions of 110(a)(2) address various topics there is ample evidence<sup>14</sup> to suggest that only the §110(a)(2) criteria which are linked with a particular area's designation and classification are relevant to §172(c)(7). This nonattainment SIP submittal satisfies all applicable CAA §110(a)(2) criteria, and evidenced by the state's nonattainment new source review program which addresses 110(a)(2)(i), the included control strategy, and the associated emissions limits which are relevant to 110(a)(2)(A). In addition, on October 31, 2011, the DNR submitted to EPA an infrastructure SIP to demonstrate that the DNR has the necessary plans, programs, and statutory authority to implement the requirements of Section 110 of the CAA as they pertain to the 2008 lead NAAQS.

### 10.4. Equivalent Techniques

The DNR followed existing regulations, guidance, and standard practices when conducting dispersion modeling, preparing emissions inventories, and implementing planning procedures. The DNR did not use or request approval of alternative or equivalent techniques as allowed under §172(c)(8) of the CAA.

<sup>14</sup> As one example, see a proposal discussing this issue in 76 FR 79579 (December 22, 2011, specifically pages 79583-79584) and the promulgation of those associated positions in the final rule 77 FR 34189 (June 12, 2012).

## 11. Administrative Materials & Responses to Public Comments

State Implementation Plans addressing nonattainment areas must comply with general planning provisions in addition to the special provisions in §172 of the Clean Air Act. For example, Subpart F of 40 CFR 51 identifies procedural requirements and Appendix V of 40 CFR 51 establishes minimum criteria that must be met before a SIP revision can be considered an official submittal. This SIP submittal satisfies all the procedural requirements and addresses all the administrative criteria. The order of materials discussed below generally follows that of Section 2.1 of Appendix V of 40 CFR 51.

### 11.1. Submittal Letter

A formal letter of submittal from the designee of the Governor of the State of Iowa, requesting EPA approval of the proposed revision to the SIP for the State of Iowa, is included with the SIP submittal.

### 11.2. Evidence of State Adoption

The Iowa Environmental Protection Commission (EPC) approved on <DATE> this plan for submittal to EPA as a revision of the State Implementation Plan to address lead nonattainment in Council Bluffs. The DNR followed all applicable procedural requirements of the state's laws and constitution in obtaining the adoption of this plan.

### 11.3. Necessary Legal Authority

The DNR is the regulatory agency with primary responsibility for outdoor air quality permitting and compliance activities in the state of Iowa. The DNR's authority is set forth in chapter 455B of the Code of Iowa and implemented through 567 – IAC chapters 10 and 20-35, and 561 – IAC chapters 2 and 7. The DNR's permitting and compliance programs and associated rules have previously been approved by EPA as part of the State of Iowa's SIP.

The State of Iowa has the necessary legal authority under state statute to adopt and implement this plan. Iowa Code section 455B.133(3) provides that the Iowa Environmental Protection Commission shall "adopt, amend, implement, or repeal emission limitations or standards for the atmosphere of this state on the basis of providing air quality necessary to protect the public health and welfare." The federal NAAQS for lead are adopted by reference at 567 – IAC 28. Iowa Code section 455B.134(9) states that the duties of the director include "issu[ing] orders consistent with rules to cause the abatement or control of air pollution, or to secure compliance with permit conditions."

In combination with the DNR's existing legal authority and associated administrative regulations, the control measures and other components included in this SIP revision are adequate to provide for the timely attainment and maintenance of the 2008 lead NAAQS.

### 11.4. Evidence of Public Notice & Public Hearing Certification

The DNR's public participation process uses procedures to ensure the requirements in 40 CFR 51.102 and Appendix V are met. The public notice of the proposed action to issue Alter Metal Recycling's construction permit included a 35-day public comment period (from July 22 to August 25, 2014) with an opportunity to request a public hearing. The notice was published on July 20, 2014, in *The Daily Nonpareil*, a periodical based in Council Bluffs published Tuesday-Sunday. A copy of this notice is provided in Appendix E. The DNR also provided notice of the draft permit through our construction permit [website](#) (note, the permit is no longer listed as the comment period has ended). The DNR did not receive a request to hold a public hearing nor were any public comments received on Alter Metal Recycling's draft construction permit.

Notice of the DNR's intention to revise the State Implementation Plan for the Council Bluffs lead nonattainment area and notice providing a 33-day public comment period with a public hearing was published on Thursday, November 20, 2014, in *The Daily Nonpareil*. Proof of publication is included in Appendix E. A list serve notice regarding the public comment period and public hearing was transmitted on November 20, 2014, to over 500 Iowa air quality list serve members.

An electronic copy of the nonattainment SIP document was posted on the DNR's Public Input Webpage at <http://www.iowadnr.gov/InsideDNR/RegulatoryAir/StakeholderInvolvement.aspx>. A copy of the nonattainment SIP was made available to the public at the Council Bluffs Public Library, located at 400 Willow Ave, Council Bluffs, Iowa, 51503. The comment period started on November 20, 2014, and lasted through December 22, 2014. In accordance with the information published in the public notice, a public hearing was conducted at 10:30 am on December 22, 2014, at the Council Bluffs Public Library.

### 11.5. Compilation of Public Comments and the State's Responses

During the public hearing the DNR received one oral comment. Seven written comments were submitted to DNR, three from business/industry and four from U.S. EPA.<sup>15</sup> Copies of all comments received, including a transcription of the oral comment, are available from the DNR upon request. A summary of the comments and the DNR's responses are provided below.

#### Comment 1 (contingency measures)

The commenter recommended adding a new paragraph to the end of Chapter 8 to create additional contingency measures which would require the department to investigate, and address as appropriate, other potential lead sources in the area, including specifically vehicle traffic on 9<sup>th</sup> Avenue as well as scrap handling, torching, and shredding operations at Alter Metal Recycling. The commenter provided three areas of support for their recommendation. First, the commenter noted that the state conducted a preliminary review of possible lead emissions from 9<sup>th</sup> Ave but did not include possible lead emissions from 9<sup>th</sup> Ave in the air quality modeling. The commenter then noted that traffic accesses Griffin Pipe's and Alter Metal Recycling's properties using 9<sup>th</sup> Ave, and asserted that 9<sup>th</sup> Avenue's vehicle miles traveled (VMT) must be comparable to Griffin's and Alter's traffic. Second, the commenter mentioned a study conducted by the Houston Department of Health and Human services of ambient air quality near metal recyclers in Houston, Texas, that would indicate sources other than haul roads at metal recycling facilities emit lead. The commenter believes the department should, as a contingency measure, investigate other potential sources of lead emissions from Alter Metal Recycling given the amount of scrap processed, the numerous transfer points, the auto shredder operations, and the cutting/torching operations. Third, the commenter noted that contingency measures in lead nonattainment SIPs from Missouri and Michigan include conditions pertaining to conducting additional lead emissions studies.

#### *Department Response*

New language has been added in Chapter 8 to reflect a potential need for additional study of lead emissions if contingency measures are triggered. While impacts due to possible lead emissions from 9<sup>th</sup> Ave were accounted for in the lead background value that was used in the air quality analysis, the new language in Chapter 8 withholds presumptions of culpability for specific sources, such as those identified by the commenter, and instead provides flexibility in a review of additional lead emissions, which may include evaluation of possible lead emissions from vehicle movement on 9<sup>th</sup> Ave. The new language strengthens the contingency measures and preserves the requirement that both facilities submit an

<sup>15</sup> Seven comments were compiled from three documents, one letter from EPA and two from business/industry.

emissions evaluation meeting the criteria and timelines specified by the department if the contingency measures (increased sweeping frequencies) are triggered but prove insufficient to prevent another NAAQS violation. This existing mechanism, which is enforceable through Alter Metal Recycling's construction permit and Griffin Pipe's ACO, enables additional review of lead emissions from either facility if warranted. Potential lead emissions from those activities at Alter Metal Recycling mentioned by the commenter (scrap handling and transfer points, torching, and shredding operations) were reviewed by the department. The department has concluded, based on information supplied by both Alter Metal Recycling and Griffin Pipe, that the control measures account for the substantial lead sources and are sufficient to attain the 2008 lead NAAQS in an expeditious manner. If necessary, these assumptions can be reviewed within the context of the new language added at the end of Chapter 8.

#### Comment 2 (receptor placement)

The commenter was of the opinion that the impacts (Table 6-5 and Table 6-6 of the SIP document) that the department used to develop the control strategy were overly conservative because the modeling utilized fictional receptor locations on the property line between the facilities. The commenter stated that these receptors are either on Griffin Pipe's property or on Alter Metal's property and therefore, there is no public property that separates the facilities. The result is that the fictional receptors, which cannot exist in space, cut in half the allowed emissions for each facility. For both Griffin Pipe and Alter Metal Recycling, the commenter believes that the approach appears to require a higher level of control than what is needed to protect the general public under the NAAQS for lead.

#### *Department Response*

Ignoring the combined impact at receptors along the property line that divides the two facilities reduces the maximum impacts from both facilities to 0.134  $\mu\text{g}/\text{m}^3$  (under the requirements in Attachment B of Griffin Pipe's ACO) and 0.130  $\mu\text{g}/\text{m}^3$  (under the requirements in Attachment A of Griffin Pipe's ACO). These impacts include background and are only 10 to 13 percent lower than the total impacts at the receptors located on the property line that divides the two facilities. In both scenarios, Alter Metal Recycling becomes the main contributor (~90%) to the maximum concentration when the receptors along the property line that divides the two facilities are excluded. These results indicate that the approach used for receptor placement in the modeling analysis did not result in a higher level of control than what is needed to meet the lead NAAQS.

#### Comment 3 (road silt sample averaging)

The commenter sought clarification of differences in silt sample averaging requirements between the Alter Metal Recycling permit and the requirements in Griffin Pipe's ACO. Griffin Pipe's ACO requires that compliance with the silt loading limit be based on a 3-month rolling average. The commenter believed the use of a 3-month rolling average provides compliance clarification that is missing from their own permit. The commenter requested that their silt loading sampling and compliance requirements be interpreted to have a similar meaning and that the DNR recognize this clarification in writing.

#### *Department Response*

The current language in the Alter Metal Recycling construction permit specifies that compliance with the silt loading limit be based on data collected during a single month. The existing language in the Alter Metal Recycling permit will remain until the commenter submits a permit application with supporting justification requesting a change in compliance measures associated with silt sampling and the department processes the application.

Comment 4 (termination language)

The commenter recommended deletion of the language in section VIII of the ACO with Griffin Pipe which allowed the department to terminate the ACO at any time. Section 110(a)(2)(A) of the CAA requires that implementation plans contain control measures which are enforceable. The commenter stated that an element of enforceability is whether the control measures are permanent in nature.

*Department Response*

The department agrees with the comment and will remove the language “or terminated by DNR in writing” from Section VIII. TERMINATION OF THIS ADMINISTRATIVE CONSENT ORDER of the ACO with Griffin Pipe.

Comment 5 (standard operating procedures)

The commenter noted that Attachments A and B of Griffin Pipe’s ACO both contain references to Standard Operating Procedures (SOPs) Met180CB and Melt220CB but these SOPs are not, but should be, included in the SIP. The commenter stated that the department retains the discretion to submit only those portion of the SOPs relied upon as a part of the attainment strategy modeled to meet the 2008 lead NAAQS.

*Department Response*

The department agrees that both SOPs (Met180CB and Melt220CB) should be included with the SIP. They have therefore been discussed in Chapter 5 and added in Appendix B-1. While not all aspects of these SOPs pertain to lead emissions or were relied upon as part of the attainment strategy modeling, they have been included in their entirety for simplicity and completeness purposes. Only those portions relevant to lead emissions are applicable to the SIP.

Comment 6 (temperature-related control strategy exemptions: sweeping and silt load testing)

The commenter recommended that provisions in Griffin Pipe’s ACO related to paved haul road sweeping and silt testing at low ambient air temperatures be modified. Specific language in the ACO that is of concern is located at Paragraph J.ii and Paragraph K of Attachment A, Section A-5, and Paragraph K.iv and Paragraph L of Attachment B, Section B-5. That language 1) temporarily suspends haul road sweeping requirements if ambient air temperatures measured at the facility during daylight operating hours will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, and 2) does not require silt load testing in a month where sweeping could not be accomplished due to ambient temperatures or hazardous weather. The commenter was concerned that these provisions, taken together, could lead to exceedances of the silt loading limits and could lead to a preventable violation of the lead NAAQS.

Additionally, the commenter was concerned that that if contingency measures are triggered, the associated requirements to increase the frequency of sweeping events could be delayed if daytime temperatures are below 35° F, which could cause a significant delay in attainment of the lead NAAQS. The commenter recommended the language be revisited to require sweeping and silt load testing regardless of ambient air temperature. The commenter also mentioned that a Tymco DST-4 or equivalent sweeper can be operated without the use of water (and the functionality and safety of the equipment should not be compromised during colder temperatures). The commenter noted the language could be modified to 1) allow sweeping, without the use of water, or 2) allow for the suspension of sweeping if snow or ice are present on paved roadways at the facility. The commenter suggested modifying the Alter Metal Recycling construction permit in accordance with the above suggestions.

*Department Response*

No lead NAAQS violations have been measured during the winter at the nonattainment lead monitor. The department believes the likelihood of a future violation arising because of the temperature exclusions is very low. The temperate-based exclusion allows, for example, the facility the flexibility to avoid sweeping when it would be hazardous to do so, such as conditions that would remove material added to the roadway for traction or other safety concerns. From a compliance perspective, the department believes it is not prudent to replace a verifiable and quantitative compliance parameter (35° F) with a qualitative and subjective measure (the presence of ice and snow on a roadway). Based on these considerations the department does not believe it is appropriate at this time to modify condition A-5.J.ii, A-5.K, B-5-K.iv, or B-5-L in Griffin Pipe’s ACO.

To address the commenter’s concerns with the contingency measures the department has added the following new language into Griffin Pipe’s ACO which allows the temperature dependence provisions to be reevaluated when warranted:

A new item in Attachment A at A-5.O.ii

ii. If a monitored exceedance of the lead NAAQS occurs during months in which the inclement weather provision as specified in condition A-5.J.ii applied, the inclement weather provisions, and condition A-5.K, shall be reevaluated by the Department and Griffin Pipe shall submit an emissions evaluation meeting the criteria and timeline as specified by the Department. If the reevaluation indicates that the implementation of the inclement weather provisions in conditions A-5.J.ii and A-5.K contributed to the monitored exceedance of the lead NAAQS then the Department shall modify these provisions to prevent future exceedances of the lead NAAQS.

A new item in Attachment B at B-5.O.ii

ii. If a monitored exceedance of the lead NAAQS occurs during months in which the inclement weather provision as specified in condition B-5.K.iv applied, the inclement weather provisions, and condition B-5.L, shall be reevaluated by the Department and Griffin Pipe shall submit an emissions evaluation meeting the criteria and timeline as specified by the Department. If the reevaluation indicates that the implementation of the inclement weather provisions in conditions B-5.K.iv and B-5.L contributed to the monitored exceedance of the lead NAAQS then the Department shall modify these provisions to prevent future exceedances of the lead NAAQS.

The department will review and modify as appropriate the conditions in Alter Metal Recycling’s permit when the facility requests future changes to their construction permit.

Comment 7 (Public Access Restrictions)

The commenter noted that the attachments to the Griffin Pipe ACO require the facility to “restrict public access to the facility at all property boundary lines.” The commenter expressed concern that this language does not provide sufficient detail and noted that the Alter Metal Recycling permit contains more specific requirements relating to public access restrictions. The commenter recommended that the Griffin Pipe ACO be modified to describe specific measures that are to be implemented in order to restrict public access, or if sufficient measures are already in place that the SIP include additional information concerning these controls and that modifications to the order be made to explicitly require continued use of those public access controls.

*Department Response*

The department has added details in Chapter 6 regarding measures used at Griffin Pipe to restrict public access. Such measures incorporate multiple levels of security with a degree of redundancy, including fencing around the facility, gates at roadway entry points, and the use of 24-hour security personnel and video surveillance. The language in the ACO is retained without modification to avoid overprescribing perimeter security measures while ensuring Griffin Pipe continues to restrict public access through a flexible mechanism.

Comment 8 (oral comment from the public hearing)

The commenter expressed concerns over increased pollution as the nation grows and the commenter would like to see the state do more than is being done to control pollution. The commenter was concerned with the overall effects of pollution on individuals extremely sensitive to pollutants, children, adults, and pets, and believes factories should not be located in the middle of towns.

*Department Response*

Implementation of the control measures included in the lead nonattainment SIP will provide significant lead emissions reductions. The department has developed the lead nonattainment SIP to achieve EPA's health and welfare based lead air quality standards and to attain the lead air quality standards as expeditiously as practicable.

## Appendix A. Baseyear 2010 Haul Road Emissions Calculations

Haul road emissions cannot be directly measured and instead are computed from emission factors and facility traffic data. The DNR estimated the 2010 baseyear haul road lead emission at Griffin Pipe and Alter Metal Recycling using the methods and information discussed in this appendix.

**Paved Roads Emission Factors**

The paved road emission factors for Griffin Pipe and Alter Metal Recycling were determined using site-specific data and Equation (1) from AP-42, Chapter 13, Section 13.2.1 (dated January 2011):<sup>16</sup>

$$E = k (sL)^{0.91} \times (W)^{1.02} \quad (1)$$

where: E = lead emission factor (pounds of lead per vehicle mile traveled, lb/VMT)  
k = particle size multiplier for suspendable particulate (0.011 lb/VMT)  
sL = the amount of lead in the suspendable particulate (g/m<sup>3</sup>), and  
W = average weight (tons) of the vehicles traveling the road segment.

The amount of suspendable particulate on the haul roads (the silt-loading) was determined using facility-specific sampling data collected in accordance with Appendix C.1 of AP-42. The collected suspendable particulate (silt) was chemically analyzed to measure its total lead content. The lead loading value (sL) is obtained by multiplying the silt loading (g/m<sup>3</sup>) by the mass of lead in each gram of silt. The average vehicle weight reflects the fleet-average vehicle weight for that road segment.<sup>17</sup> To obtain the lead emission rate (in lbs/hr) for a roadway, the lead emission factor is multiplied by the VMT for a given roadway for a given hour. The VMT is derived from the length of the roadway, the amount of traffic, and operating schedules.

**Unpaved Roads Emission Factors**

The methods for estimating fugitive lead emissions from unpaved roads are similar to those for paved roads. A different equation, as provided in AP-42, Chapter 13, Section 13.2.2 (dated November 2006), is required:

$$E = k (s/12)^{0.7} \times (W/3)^{0.45} \quad (2)$$

where: E = lead emission factor (pounds of lead per vehicle mile traveled, lb/VMT)  
k = industrial road suspendable particulate constant (4.9 lb/VMT),  
s = surface material lead content of silt (%), and  
W = average weight (tons) of the vehicles traveling the road.

The empirical constants 0.7 and 0.45 in the above equation were obtained from AP-42 Table 13.2.2-2.

<sup>16</sup> Additional background information on haul road emission factors can be found in Chapter 13 "Miscellaneous Sources" of AP-42, see: <http://www.epa.gov/ttn/chief/ap42/ch13/index.html>

<sup>17</sup> This is required by AP-42 13.2.1.3: "For example, if 99 percent of traffic on the road are 2 ton cars/trucks while the remaining 1 percent consists of 20 ton trucks, then the mean weight "W" is 2.2 tons. More specifically, Equation 1 is not intended to be used to calculate a separate emission factor for each vehicle weight class. Instead, only one emission factor should be calculated to represent the "fleet" average weight of all vehicles traveling the road."

### Input Data

Calculating the emission factors and VMTs for each haul road is a data intensive process requiring site-specific data. Each facility supplied the necessary haul road route data, roadway segment locations, segment lengths (and widths for modeling purposes), traffic activity data (such as vehicle weights, trip counts, and operating schedules), and roadway silt sampling results.<sup>18</sup> These data are discussed below.

### A-1. Griffin Pipe

On August 23, 2012, Griffin Pipe collected 18 samples from their haul roads to be analyzed for surface material loadings. All areas sampled were paved as all routes at Griffin Pipe are paved. The approximate locations where samples were collected are shown in Figure A-1. The laboratory analysis included sieving all samples (see Appendix C.2 of AP-42 for a description of the required procedures). Sieving separates the suspendable particulate (smaller particles likely to become airborne when travelled over, referred to here as “silt”) from the larger particles in the sample. The lead content within the silt was analyzed in 10 of the 18 samples. Griffin Pipe chose to analyze the lead content within the pre-sieved (bulk) material (all material collected via vacuuming or sweeping material off the roadway) in the remaining 8 samples. The analytical results from the sampling are shown in Table A-1 and Table A-2.

Griffin Pipe segmented their facility traffic into 61 different roadway sections. The segments are shown in Figure A-2. Fourteen segments were excluded from additional consideration as no haul road activity was reported for those segments. The DNR assigned a lead silt loading value for the remaining 47 segments from the available sampling results. The silt loading values and the lead concentrations for each segment were developed by either averaging the results from different samples or selecting a single representative sample, using engineering judgment as necessary.<sup>19</sup> Table A-3 identifies which samples were used for each road segment.

A detailed accounting of traffic activity was also provided by Griffin Pipe, including vehicle weights, trip counts, roadway segment lengths and widths, and traffic schedules. The DNR reviewed the information and adjusted road lengths based upon aerial imagery of the facility. The traffic data provided by Griffin Pipe accounted for over 2,500 separate (time-variant by hour of day) vehicle trips per week. The average vehicle weight and VMT values calculated for each segment incorporate a large amount of data and each are hour of day dependent. Due to the volume of information accounted for within the baseline emission rates and the associated complexity of the spreadsheets, they are not readily reproducible in this document. Instead, the time-invariant characteristics for the 47 road segments are provided in Table A-4 (this table also provides the road widths and vehicle heights & widths used in the dispersion modeling). The total baseline haul road emissions (see Table 3-1) were calculated by summing the hourly emission rates (not shown) and assuming haul road operations were consistent six days a week and 52 weeks per year. This is a conservative approach.

<sup>18</sup> To accommodate emissions calculations and dispersion modeling requirements, the DNR refined or segmented the supplied haul road routes as necessary. Dispersion modeling techniques and emissions calculations methods require a single emission rate for each segment of roadway. Facility data may be defined according to overlapping routes differentiated by materials hauled, paths travelled, or other internal considerations. Where necessary, the DNR split haul roads or routes into multiple segments to accommodate emissions and modeling needs.

<sup>19</sup> The lead concentrations analyzed from the eight pre-sieved samples were used in this evaluation by assuming their lead concentrations would not vary with sieving.

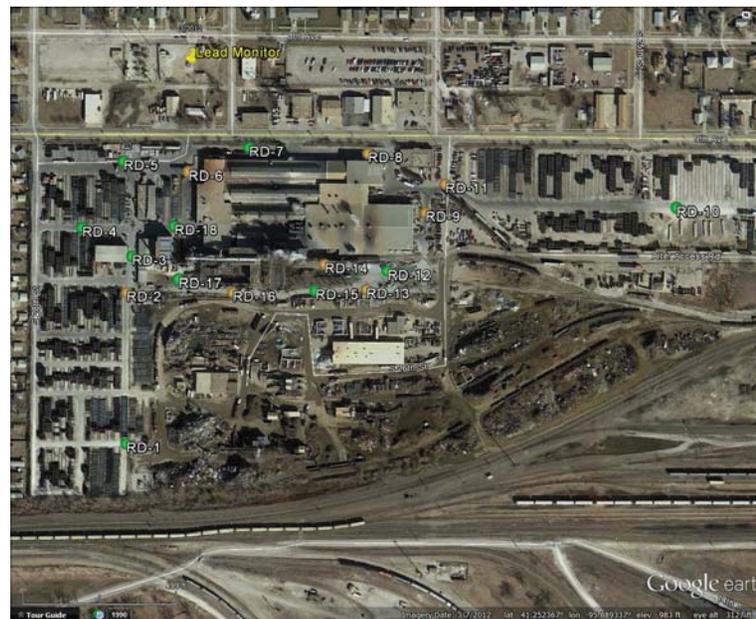


Figure A-1. Approximate locations of the 18 samples collected on August 23, 2012, by Griffin Pipe. Locations in green had the silt analyzed for lead. At locations marked in orange the lead was measured in samples that were not sieved (the bulk sample).

Table A-1. Summary of analytical results for the 10 samples with the lead content measured in the sieved material (silt) from Griffin Pipe.

| Sample ID | Sample Area (m <sup>2</sup> ) | Silt Content (g) | Silt Content (%) | Silt Loading (g/m <sup>2</sup> ) | Lead Content of Silt (µg/kg) |
|-----------|-------------------------------|------------------|------------------|----------------------------------|------------------------------|
| RD-1      | 6.50                          | 197.63           | 18.6             | 30.40                            | 270,000                      |
| RD-3      | 89.07                         | 147.86           | 7.3              | 1.66                             | 450,000                      |
| RD-4      | 132.19                        | 140.52           | 7.8              | 1.06                             | 180,000                      |
| RD-5      | 78.04                         | 130.71           | 11.8             | 1.67                             | 310,000                      |
| RD-7      | 106.19                        | 271.03           | 23.0             | 2.55                             | 340,000                      |
| RD-10     | 143.19                        | 10.22            | 0.8              | 0.07                             | 180,000                      |
| RD-12     | 4.79                          | 94.20            | 17.8             | 19.67                            | 92,000                       |
| RD-15     | 5.53                          | 145.63           | 22.5             | 26.33                            | 850,000                      |
| RD-17     | 9.56                          | 187.70           | 35.0             | 19.63                            | 310,000                      |
| RD-18     | 31.16                         | 93.47            | 12.5             | 3.00                             | 390,000                      |

Table A-2. Silt loading of the sieved material and the lead content of pre-sieved (bulk) material for the remaining 8 samples collected by Griffin Pipe.

| Sample ID | Sample Area (m <sup>2</sup> ) | Silt Content (g) | Silt Content (%) | Silt Loading (g/m <sup>2</sup> ) | Lead Content of Pre-Sieved (Bulk) Material (µg/mg) |
|-----------|-------------------------------|------------------|------------------|----------------------------------|----------------------------------------------------|
| RD-2      | 96.99                         | 168.50           | 21.5             | 1.74                             | 300,000                                            |
| RD-6      | 111.62                        | 81.56            | 8.5              | 0.73                             | 92,000                                             |
| RD-8      | 126.62                        | 100.01           | 10.8             | 0.79                             | 210,000                                            |
| RD-9      | 109.63                        | 71.79            | 7.7              | 0.65                             | 200,000                                            |
| RD-11     | 136.05                        | 41.12            | 6.0              | 0.30                             | 300,000                                            |
| RD-13     | 18.19                         | 156.73           | 19.3             | 8.62                             | 280,000                                            |
| RD-14     | 3.98                          | 167.37           | 20.0             | 42.05                            | 130,000                                            |
| RD-16     | 21.55                         | 158.94           | 18.7             | 7.38                             | 570,000                                            |



Figure A-2. Depiction of the 61 roadway segments (all paved) identified by Griffin Pipe. Only 47 segments are associated with haul road traffic.

Table A-3. Roadway samples averaged (or assigned) for each road segment and the resultant silt loading, lead, and lead loading values within the silt.

| Road Segments                              | Samples Averaged or Assigned | Silt Loading (g/m <sup>2</sup> ) | Lead in Silt (µg/kg) | Pb-Silt Loading (g/m <sup>2</sup> ) |
|--------------------------------------------|------------------------------|----------------------------------|----------------------|-------------------------------------|
| 1, 2, 3, 4, 11, 12, 13, 14, 15, 16, 17, 29 | RD-2, 3, 4, 5                | 1.53                             | 310,000              | 0.000475483                         |
| 24, 25, 26, 32, 36, 37, 38, 43, 45         | RD-12, 15, 17                | 21.88                            | 417,333              | 0.009129862                         |
| 39, 40, 41, 42, 46, 47                     | RD-8, 9                      | 0.72                             | 205,000              | 0.0001476                           |
| 48, 49, 53, 56, 58                         | RD-10, 11                    | 0.19                             | 240,000              | 0.0000444                           |
| 27, 28                                     | RD-18                        | 3.00                             | 390,000              | 0.00117                             |
| 34, 35                                     | RD-14                        | 42.05                            | 130,000              | 0.0054665                           |
| 5, 6, 9, 10, 18, 19, 21, 23                | RD-1                         | 30.40                            | 270,000              | 0.008208                            |
| 30, 31, 33                                 | RD-7                         | 2.55                             | 340,000              | 0.000867                            |

Table A-4. Baseline characteristics of haul road segments at Griffin Pipe. Vehicle height and width values are calculated for dispersion modeling purposes.

| Row Number | Segment ID | Length (ft) | Width (ft) | Samples Averaged | Silt Loading (g/m <sup>2</sup> ) | Pb Silt (µg/mg) | Pb-Silt Loading (g/m <sup>2</sup> ) | Vehicle Height (ft) | Vehicle Width (ft) |
|------------|------------|-------------|------------|------------------|----------------------------------|-----------------|-------------------------------------|---------------------|--------------------|
| 1          | 1          | 112         | 14         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 12.91               | 8.45               |
| 2          | 2          | 177         | 14         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.83                | 8.50               |
| 3          | 3          | 175         | 14         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.82                | 8.50               |
| 4          | 4          | 174         | 14         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.50                | 8.50               |
| 5          | 5          | 190         | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 6          | 6          | 149         | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 7          | 9          | 151         | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 8          | 10         | 151         | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 9          | 11         | 295         | 14         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.52                | 8.50               |
| 10         | 12         | 295         | 21.3       | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 12.14               | 8.50               |
| 11         | 13         | 318         | 21.3       | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.67                | 8.50               |
| 12         | 14         | 321         | 30         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.88                | 8.09               |
| 13         | 15         | 171         | 29         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 8.06                | 5.54               |
| 14         | 16         | 171         | 29         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 8.27                | 5.92               |
| 15         | 17         | 164         | 29         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 9.07                | 7.63               |
| 16         | 18         | 193         | 29         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 17         | 19         | 153         | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 18         | 21         | 216         | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 19         | 23         | 88          | 14         | RD-1             | 30.40                            | 270,000         | 8.208E-03                           | 9.50                | 8.50               |
| 20         | 24         | 136         | 14         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 9.79                | 6.68               |
| 21         | 25         | 78          | 14         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 8.75                | 5.50               |
| 22         | 26         | 62          | 30         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 11.03               | 8.50               |
| 23         | 27         | 209         | 30         | RD-18            | 3.00                             | 390,000         | 1.170E-03                           | 9.04                | 7.54               |

| Row Number | Segment ID | Length (ft) | Width (ft) | Samples Averaged | Silt Loading (g/m <sup>2</sup> ) | Pb Silt (µg/mg) | Pb-Silt Loading (g/m <sup>2</sup> ) | Vehicle Height (ft) | Vehicle Width (ft) |
|------------|------------|-------------|------------|------------------|----------------------------------|-----------------|-------------------------------------|---------------------|--------------------|
| 24         | 28         | 174         | 26         | RD-18            | 3.00                             | 390,000         | 1.170E-03                           | 13.00               | 8.50               |
| 25         | 29         | 198         | 26         | RD-2, 3, 4, 5    | 1.53                             | 310,000         | 4.755E-04                           | 10.42               | 8.08               |
| 26         | 30         | 90          | 30         | RD-7             | 2.55                             | 340,000         | 8.670E-04                           | 12.04               | 7.83               |
| 27         | 31         | 351         | 22.5       | RD-7             | 2.55                             | 340,000         | 8.670E-04                           | 11.66               | 7.53               |
| 28         | 32         | 611         | 23         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 11.80               | 7.64               |
| 29         | 33         | 287         | 22.5       | RD-7             | 2.55                             | 340,000         | 8.670E-04                           | 11.66               | 7.54               |
| 30         | 34         | 128         | 30         | RD-14            | 42.05                            | 130,000         | 5.467E-03                           | 13.00               | 8.50               |
| 31         | 35         | 86          | 30         | RD-14            | 42.05                            | 130,000         | 5.467E-03                           | 11.97               | 7.75               |
| 32         | 36         | 37          | 30         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 11.33               | 7.29               |
| 33         | 37         | 206         | 14         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 12.94               | 8.50               |
| 34         | 38         | 206         | 12         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 13.00               | 8.50               |
| 35         | 39         | 63          | 30         | RD-8, 9          | 0.72                             | 205,000         | 1.476E-04                           | 9.50                | 8.50               |
| 36         | 40         | 140         | 30         | RD-8, 9          | 0.72                             | 205,000         | 1.476E-04                           | 9.30                | 6.20               |
| 37         | 41         | 106         | 30         | RD-8, 9          | 0.72                             | 205,000         | 1.476E-04                           | 9.42                | 7.53               |
| 38         | 42         | 262         | 30         | RD-8, 9          | 0.72                             | 205,000         | 1.476E-04                           | 9.60                | 8.50               |
| 39         | 43         | 37          | 27.7       | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 12.97               | 8.50               |
| 40         | 45         | 36          | 14         | RD-12, 15, 17    | 21.88                            | 417,333         | 9.130E-03                           | 13.00               | 8.50               |
| 41         | 46         | 106         | 30         | RD-8, 9          | 0.72                             | 205,000         | 1.476E-04                           | 9.41                | 7.74               |
| 42         | 47         | 146         | 26.4       | RD-8, 9          | 0.72                             | 205,000         | 1.476E-04                           | 10.87               | 7.43               |
| 43         | 48         | 150         | 26.6       | RD-10, 11        | 0.19                             | 240,000         | 4.440E-05                           | 9.49                | 7.94               |
| 44         | 49         | 100         | 30.4       | RD-10, 11        | 0.19                             | 240,000         | 4.440E-05                           | 9.49                | 8.01               |
| 45         | 53         | 382         | 30.4       | RD-10, 11        | 0.19                             | 240,000         | 4.440E-05                           | 10.06               | 8.50               |
| 46         | 56         | 110         | 30.4       | RD-10, 11        | 0.19                             | 240,000         | 4.440E-05                           | 10.29               | 8.50               |
| 47         | 58         | 514         | 30.4       | RD-10, 11        | 0.19                             | 240,000         | 4.440E-05                           | 10.29               | 8.50               |

## A-2. Alter Metal Recycling

On June 3, 2013, Alter Metal Recycling collected eight silt samples on their haul roads and evaluated each sample for both silt content and the lead content in the silt. The approximate sampling locations are shown in Figure A-3. The analytical results from the silt sampling are shown in Table A-5. Most haul roads were paved and the majority of traffic at the facility used paved roads. A smaller amount of traffic used unpaved roads, and appropriately a smaller number of samples (two of the eight) were collected on unpaved roads.

Alter Metal Recycling identified haul routes (see Figure A-4) using roadway locations, material types transported, and an inbound/outbound distinction. The DNR converted the facility traffic route information provided by Alter Metal Recycling into 17 different segments, as depicted in Figure A-5. The DNR assigned lead-loading values from the available sampling results and segment lengths using Google Earth imagery. The silt loading values and the lead concentrations for each segment were developed by either averaging the results from different samples or selecting a single representative sample. Table A-6 identifies which samples were used for each road segment.

Alter Metal Recycling provided a detailed accounting of their traffic activity. Traffic data included vehicle weights, trip counts, roadway and route locations, route lengths and widths, and traffic schedules. The provided traffic data accounted for time-variant (by hour of day and weekday versus Saturday operations) vehicle trip information. The calculations of the average vehicle weights and the vehicle miles travelled for each segment incorporate a large amount of data due to the complex traffic patterns, overlapping routes, variable vehicle types and weights, and the volume of traffic at Alter Metal Recycling. The spreadsheets that detail the baseline emission rates calculations are not reproducible in a meaningful format in this document because of this complexity. Instead, the time-invariant characteristics for each of the 17 road segments are provided in Table A-7 (this table also provides the road widths, vehicle heights, and vehicle widths used in the dispersion modeling) and total route lengths with the associated paths are given in Table A-8. The total baseline haul road emissions (see Table 3-1) were calculated by summing the hourly emission rates (not shown) and assuming the facility operated 6 days a week and 52 weeks a year. This is a conservative approach.

Note, a small amount of Griffin Pipe's traffic uses Alter Metal Recycling's road segments 1, 3, 4, and 5. While these emissions are attributed to Alter Metal Recycling in the baseline emissions summary presented in Table 3-1, for modeling purposes these emissions were separated and apportioned to each facility as appropriate.

## A-3. Data Caveats

As mentioned above, Griffin Pipe collected and provided lead silt-loading data in 2012. Alter Metal Recycling collected and provided their lead silt-loading data in 2013. The traffic activity information provided by Alter Metal Recycling is based upon calendar year 2012 data. Traffic data from Griffin Pipe is comparably recent. The data are not specific to the 2010 baseyear but are the best available and were used to calculate the baseline inventory. While traffic levels and silt-loadings may not remain constant from year to year the data are not known to be biased.

Another caveat is that the silt sampling conducted by the facilities occurs prior to any haul road sweeping or watering efforts used to mitigate fugitive dust emissions. The lead silt-loading values used to estimate the baseline emissions are thus expected to reflect worse case conditions. Additionally, the estimated actual haul road emissions have not been adjusted (reduced) to account for precipitation. While these assumptions are conservative in nature and are expected to overpredict the true haul road baseline emission rates they represent common practices.

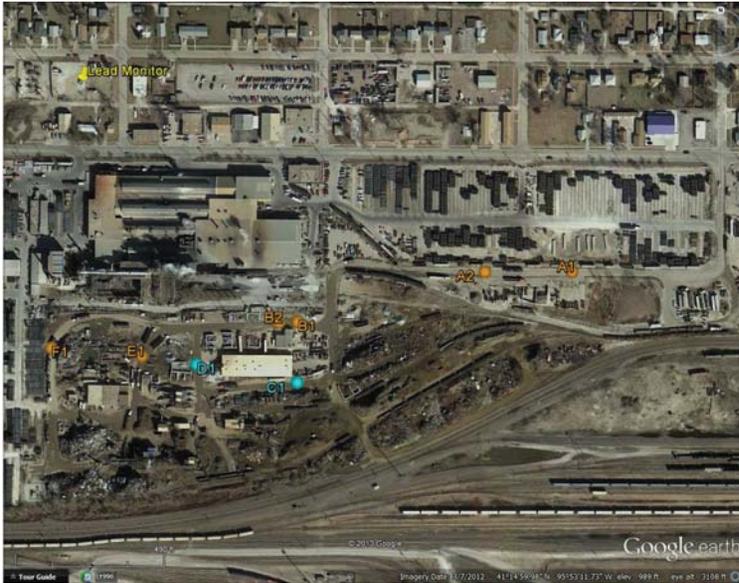


Figure A-3. Approximate locations of the 8 silt samples collected on June 3, 2013, by Alter Metal Recycling. Sample location D1 is shown in blue to differentiate this location as an unpaved road. The roadway under sample D1 was originally constructed as a paved road but was deteriorated and was treated by the DNR as an unpaved road. Sample location C1 was collected from an unpaved road.

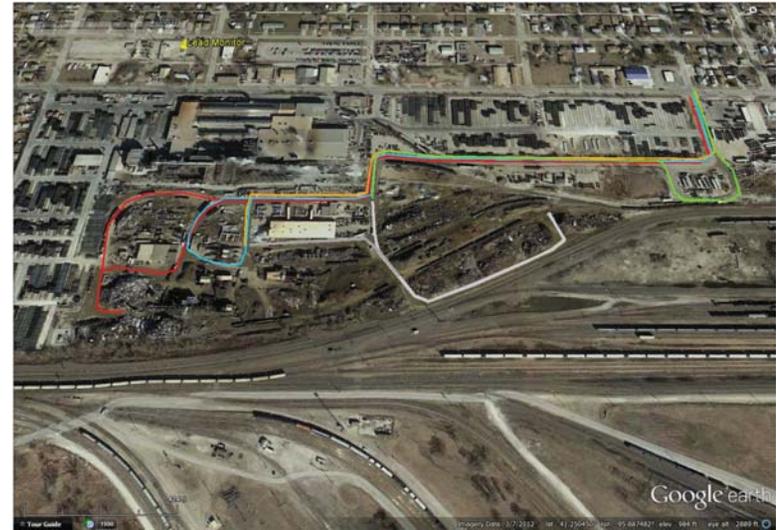


Figure A-4. Approximated depiction of the baseline routes identified by Alter Metal Recycling. Locations in gray indicate sections of roadway originally unpaved.

Table A-5. Analytical results from the silt sampling conducted by Alter Metal Recycling.

| Sample ID | Sample Location       | Road Type | Area (m <sup>2</sup> ) | Silt Content (g) | Silt Content (%) | Silt Loading (g/m <sup>2</sup> ) | Lead Content of Silt (µg/kg) |
|-----------|-----------------------|-----------|------------------------|------------------|------------------|----------------------------------|------------------------------|
| A1        | Facility access       | Paved     | 18.52                  | 139.14           | 10.3             | 7.51                             | 1,000,000                    |
| A2        | Facility access       | Paved     | 11.02                  | 198.23           | 9.8              | 17.99                            | 880,000                      |
| B1        | Truck scale           | Paved     | 4.02                   | 405.99           | 26.8             | 100.99                           | 1,300,000                    |
| B2        | Truck scale           | Paved     | 3.95                   | 306.83           | 27.1             | 77.68                            | 1,000,000                    |
| C1        | S of Non Ferrous Bldg | Unpaved   | 4.73                   | 304.32           | 14.8             | 64.34                            | 1,700,000                    |
| D1        | W of Non Ferrous Bldg | Unpaved*  | 4.10                   | 900.9            | 21.0             | 219.73                           | 750,000                      |
| E1        | E of Maintenance Shop | Paved     | 5.43                   | 351.39           | 14.2             | 64.71                            | 830,000                      |
| F1        | West property line    | Paved     | 8.45                   | 463.9            | 38.7             | 54.90                            | 930,000                      |

\*Surface originally paved, but treated as unpaved by the DNR due to deterioration.



Figure A-5. Approximated depiction of the 17 roadway segments defined for Alter Metal Recycling's baseline traffic routes. Unpaved segments are denoted by an "u" after the segment number. Segment 14 (p\*) was originally constructed as a paved road but treated as unpaved due to deterioration. All other segments are paved. Segment numbers are color-coded with the segment lines.

Table A-6. Roadway samples averaged (or assigned) for each road segment and the resultant silt loading, lead, and lead loading values within the silt.

| Paved Road Segments          | Samples Averaged | Silt Loading (g/m <sup>2</sup> ) | Lead in Silt (µg/kg) | Pb-Silt Loading (g/m <sup>2</sup> ) |
|------------------------------|------------------|----------------------------------|----------------------|-------------------------------------|
| 1, 2, 3, 4, 5, 6             | A1, A2           | 12.75                            | 940,000              | 0.011985546                         |
| 8, 9                         | B1, B2           | 89.34                            | 1,150,000            | 0.102735836                         |
| 10, 11, 12, 13               | E1, F1           | 59.81                            | 880,000              | 0.052629331                         |
| <b>Unpaved Road Segments</b> |                  |                                  |                      |                                     |
| Unpaved Road Segments        | Sample Assigned  | Silt Loading (%)                 | Lead in Silt (µg/kg) | Pb Silt Content (%)                 |
| 7, 14, 15, 16, 17            | C1               | 14.80                            | 1,700,000            | 0.02516                             |

Table A-7. Baseline characteristics of each road segment at Alter Metal Recycling. Vehicle height and width values are calculated for dispersion modeling.

| Segment ID            | Type    | Length - meters (feet) | Width (ft) | Silt Samples Averaged | Silt Loading (g/m <sup>2</sup> ) | Pb Silt (µg/mg) | Pb-Silt Loading (g/m <sup>2</sup> ) | Vehicle Height (ft) | Vehicle Width (ft) |
|-----------------------|---------|------------------------|------------|-----------------------|----------------------------------|-----------------|-------------------------------------|---------------------|--------------------|
| 1                     | paved   | 100 (328)              | 25         | A1, A2                | 12.75                            | 940,000         | 0.011986                            | 12.9                | 8.5                |
| 2                     | paved   | 160 (525)              | 25         | A1, A2                | 12.75                            | 940,000         | 0.011986                            | 9.0                 | 8.5                |
| 3                     | paved   | 61 (200)               | 25         | A1, A2                | 12.75                            | 940,000         | 0.011986                            | 13.0                | 8.5                |
| 4                     | paved   | 348 (1142)             | 25         | A1, A2                | 12.75                            | 940,000         | 0.011986                            | 12.9                | 8.5                |
| 5                     | paved   | 22 (72)                | 25         | A1, A2                | 12.75                            | 940,000         | 0.011986                            | 12.9                | 8.5                |
| 6                     | paved   | 20 (66)                | 25         | A1, A2                | 12.75                            | 940,000         | 0.011986                            | 12.9                | 8.5                |
| 8                     | paved   | 133 (436)              | 25         | B1,B2                 | 89.34                            | 1,150,000       | 0.102736                            | 13.0                | 8.5                |
| 9                     | paved   | 32 (105)               | 25         | B1,B2                 | 89.34                            | 1,150,000       | 0.102736                            | 12.9                | 8.5                |
| 10                    | paved   | 293 (961)              | 25         | E1,F1                 | 59.81                            | 880,000         | 0.052629                            | 12.9                | 8.5                |
| 11                    | paved   | 88 (289)               | 25         | E1,F1                 | 59.81                            | 880,000         | 0.052629                            | 12.9                | 8.5                |
| 12                    | paved   | 76 (249)               | 25         | E1,F1                 | 59.81                            | 880,000         | 0.052629                            | 13.0                | 8.5                |
| 13                    | paved   | 92 (302)               | 25         | E1,F1                 | 59.81                            | 880,000         | 0.052629                            | 13.0                | 8.5                |
| <b>Total Paved:</b>   |         | <b>1425 (4675)</b>     |            |                       |                                  |                 |                                     |                     |                    |
| Segment ID            | Type    | Length - meters (feet) | Width (ft) | Silt Samples Averaged | Silt Loading (g/m <sup>2</sup> ) | Pb Silt (µg/mg) | Pb-Silt Loading (g/m <sup>2</sup> ) | Vehicle Height (ft) | Vehicle Width (ft) |
| 7(u)                  | unpaved | 55 (180)               | 25         | C1                    | 14.80                            | 1,700,000       | 0.02516                             | 9.0                 | 8.5                |
| 14(p*)                | unpaved | 60 (197)               | 25         | C1                    | 14.80                            | 1,700,000       | 0.02516                             | 13.0                | 8.5                |
| 15(u)                 | unpaved | 128 (420)              | 25         | C1                    | 14.80                            | 1,700,000       | 0.02516                             | 13.0                | 8.5                |
| 16(u)                 | unpaved | 56 (184)               | 25         | C1                    | 14.80                            | 1,700,000       | 0.02516                             | 12.8                | 8.5                |
| 17(u)                 | unpaved | 245 (804)              | 25         | C1                    | 14.80                            | 1,700,000       | 0.02516                             | 9.0                 | 8.5                |
| <b>Total Unpaved:</b> |         | <b>544 (1785)</b>      |            |                       |                                  |                 |                                     |                     |                    |
| <b>Total Length:</b>  |         | <b>1969 (6460)</b>     |            |                       |                                  |                 |                                     |                     |                    |

Table A-8. Route paths and total lengths used in the baseline for Alter Metal Recycling. Routes generally reflect a round trip path through the facility, defined by the segments traversed.

| Route | Route Path (Segments)                                         | Route Length (m) |
|-------|---------------------------------------------------------------|------------------|
| 1     | 1-3-4-5-6-8-9-10-11-11-12-9-8-6-5-4-3-1                       | 1,977            |
| 2     | 1-3-4-5-6-8-9-12-13-14(p*)-8-6-5-4-3-1                        | 1,628            |
| 3     | 1-2-4-5-6-7(u)-16(u)-17(u)-17(u)-16(u)-7(u)-6-5-4-2-1         | 2,012            |
| 4     | 1-3-4-5-6-8-14(p*)-15(u)-16(u)-16(u)-15(u)-14(p*)-8-6-5-4-3-1 | 1,856            |

**IOWA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER**

|                                                                                                                    |                                                                                      |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <p>IN THE MATTER OF:</p> <p><b>GRIFFIN PIPE PRODUCTS CO.,<br/>LLC</b></p> <p><b>Pottawattamie County, Iowa</b></p> | <p style="text-align: center;">ADMINISTRATIVE CONSENT<br/>ORDER<br/>NO. 2015-AQ-</p> |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

TO: Griffin Pipe Products Co., LLC  
2601 9<sup>th</sup> Avenue  
Council Bluffs, IA 51501

CT Corporation System, Registered Agent  
500 East Court Avenue  
Des Moines, Iowa 50309

**Appendix B. Griffin Pipe Administrative Consent Order**

**I. SUMMARY**

This administrative consent order is entered into between Griffin Pipe Products Co., LLC (Griffin Pipe) and the Iowa Department of Natural Resources (DNR) for the purpose of addressing monitored lead concentrations in Council Bluffs, Iowa, that do not meet the lead National Ambient Air Quality Standards (NAAQS). This administrative consent order shall create enforceable control measures for Griffin Pipe to meet requirements of the State Implementation Plan (SIP) for the lead nonattainment area in Council Bluffs, Iowa. This administrative consent order establishes time schedules for completion of such control measures. The parties have agreed to the provisions below.

Questions regarding this administrative consent order should be directed to:

Anne Preziosi, Attorney  
DNR – Legal Services  
7900 Hickman Road, Suite 1  
Windsor Heights, Iowa 50324  
(515) 725-9551

## II. JURISDICTION

The administrative consent order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1) which authorize the Director to issue orders necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II, and the rules promulgated or permits pursuant thereto, and to prevent, abate, and control air pollution.

## III. STATEMENT OF FACTS

1. Griffin Pipe owns a ductile iron foundry located in Council Bluffs, Iowa (the "Facility"). Griffin Pipe manufactures ductile iron pressure pipe for potable water transmission and wastewater collection.

2. On November 12, 2008, EPA published in the Federal Register (73 FR 66964) a final rule that lowered the level of the lead NAAQS from 1.5 to 0.15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) of air. The revised standard requires that the maximum monitored 3-month rolling average not exceed 0.15  $\mu\text{g}/\text{m}^3$ . DNR adopted the revised lead NAAQS in 2009 and the adoption became effective on November 11, 2009.

3. DNR sited a source-oriented ambient lead monitor near the Facility in 2009. The monitor is near the intersection of 8<sup>th</sup> Avenue and South 27<sup>th</sup> Street in Council Bluffs, Iowa. In 2010, six 3-month rolling averages over the 0.15  $\mu\text{g}/\text{m}^3$  lead NAAQS were measured by DNR at this monitor. Those six values did not meet the lead health standard. The maximum 3-month average measured by DNR in 2010 occurred during the June-August period and was 0.26  $\mu\text{g}/\text{m}^3$ . (In 2012, four 3-month rolling averages over the 0.15  $\mu\text{g}/\text{m}^3$  lead NAAQS were monitored. Those four values did not meet the lead health standard. The maximum 3-month average measured by DNR in 2012 occurred during the August-October period and was 0.20  $\mu\text{g}/\text{m}^3$ .)

4. On November 22, 2011, EPA published in the Federal Register (76 FR 72097) a nonattainment designation for portions of Pottawattamie County, Iowa. The nonattainment area includes the Facility and the designation became effective December 31, 2011.

5. The State of Iowa must submit a SIP revision that meets the requirements of Clean Air Act section 172(c) and provides for attainment of the 2008 Lead NAAQS as expeditiously as practicable, but no later than December 31, 2016.

6. DNR air quality dispersion modeling of Griffin Pipe has predicted that the Facility was a contributor to the monitored lead NAAQS violations. The Facility is not the sole source of lead emissions in the nonattainment area.

7. On May 3, 2014, Griffin Pipe idled operations at its Council Bluffs plant. Griffin Pipe does not presently plan to rescind its current DNR air quality permits.

8. DNR and Griffin Pipe have been working together to quantify lead emissions, identify sources that may need controls upgraded or added, and develop options for implementing changes to achieve attainment and maintenance of the 2008 Lead NAAQS. The DNR and Griffin Pipe are entering into this administrative consent order to create two enforceable control strategies. Each control strategy contains control measures and timelines for implementation. Griffin Pipe may choose which strategy to implement.

9. Amendments to this administrative consent order and the attachments constitute a revision to the SIP and must be submitted to the EPA for approval.

10. By agreeing to the terms of this administrative consent order Griffin Pipe does not admit that the facility caused or contributed to monitored lead levels above the NAAQS.

## IV. CONCLUSIONS OF LAW

1. The emission sources located at the Facility include "air contaminant sources" as defined by Iowa Code section 455B.131(2), and "stationary sources" as defined by 567 Iowa Administrative Code (IAC) 20.2.

2. 567 IAC 28.1 states that the ambient air quality standards for the State of Iowa shall be the NAAQS located at 40 Code of Federal Regulations (CFR) Part 50, as amended through June 22, 2010. 40 CFR 50 states that the lead NAAQS is 0.15  $\mu\text{g}/\text{m}^3$ , arithmetic mean concentration over a 3-month period. The monitoring data near Griffin Pipe measured 3-month average lead concentrations in 2010 (and 2012) that did not meet the lead NAAQS. The NAAQS violations in this case constitute "air pollution" as defined in Iowa Code section 455B.131(3).

3. Effective December 31, 2011, the Facility is located in a lead nonattainment area. The lead nonattainment area is delineated according to the boundary definitions in 40 CFR 81.316.

4. Section 191(a) of the Clean Air Act provides that "[a]ny State containing an area designated or redesignated under [Clean Air Act] section 107(d) as nonattainment with respect to the national primary ambient air quality standards for...lead... shall submit to the Administrator...an applicable implementation plan meeting the requirements of this part." Clean Air Act Section 172(c) requires that "[s]uch plan provisions shall include enforceable emission limitations, and such other control measures...as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date...."

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5. Iowa Code sections 455B.134(9) and 455B.138(1) authorize the Director to issue orders necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II, and the rules promulgated or permits issued pursuant thereto, and to prevent, abate, and control air pollution. This administrative consent order creates enforceable control measures to address the lead concentrations in ambient air in Council Bluffs.

**V. ORDER**

THEREFORE, DNR and Griffin Pipe agree to the following:

1. Griffin Pipe shall either (1) implement the control measures contained in Attachment A, **or** (2) implement the control measures contained in Attachment B to this administrative consent order. Griffin Pipe may (but is not required under this administrative consent order to) install and operate additional emission control projects and may improve the emission controls listed in the attachments as necessary to further reduce ambient lead concentrations in Council Bluffs, Iowa, in compliance with applicable laws and administrative rules and with prior approval of the DNR;
2. Griffin Pipe shall either (1) meet all emission limits and all point source characteristics specified in Attachment A, **or** (2) meet all emissions limits and all point source characteristics specified in Attachment B to this administrative consent order;
3. The requirements contained in this order and Attachments A and B may be modified with the written approval of DNR and Griffin Pipe. Any request for modification to any requirements contained in this order or an attachment must be approved by the DNR prior to its respective deadline. Any modifications to this order or an attachment may be subject to approval of the US EPA and may result in the requirement to complete a modeled attainment demonstration using approved dispersion modeling techniques, if requested by DNR;
4. Griffin Pipe shall comply with the following requirements:
  - A. With respect to performance testing, Griffin Pipe shall either (1), if opting to implement the control measures contained in Attachment A, complete performance testing to demonstrate compliance with the lead emission limits contained in Attachment A in accordance with the frequency and timelines specified therein, **or** (2), if opting to implement the control measures contained in Attachment B, complete performance testing to demonstrate compliance with the lead emission limits contained in Attachment B in accordance with the frequency and timelines specified therein.

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In the event any performance testing conducted by Griffin Pipe demonstrates an exceedance, Griffin Pipe shall communicate to the DNR how the exceedance will be corrected and establish with DNR a compliance plan to address the exceedance.

B. With respect to work practices Griffin Pipe shall either (1) follow the monitoring, recordkeeping and reporting requirements contained in Attachment A to this administrative consent order when implementing the control measures specified in Attachment A beginning on the date this administrative consent order is signed by the Director, unless otherwise specified in Attachment A, **or** (2) follow the monitoring, recordkeeping and reporting requirements contained in Attachment B to this administrative consent order when implementing the control measures specified in Attachment B beginning on the date this administrative consent order is signed by the Director, unless otherwise specified in Attachment B.

If a monitoring, recordkeeping, or reporting requirement(s) specified in Attachment A or Attachment B cannot be completed due to unforeseen circumstances, then the conditions which prevented the completion of the requirement(s) shall be documented, including the time period during which the conditions preventing completion of the requirements existed and the actions taken to remedy the situation.

From the date this order is issued until the date the Facility resumes operations the monitoring, recordkeeping and reporting requirements contained in Paragraph 4 of this order shall be suspended. Resume(s) operations shall mean the resumption of pipe products manufacture and production operations, including resumption of the cupola operations at the Facility

C. The performance testing and work practices requirements may be adjusted after performance testing is completed to more accurately represent the observed operating ranges of the equipment during the successful demonstration of compliance;

5. Nothing in this Administrative Consent Order prevents Griffin Pipe from opting to comply with Attachment A, and thereafter opting (at its discretion) to comply with the requirements contained in Attachment B.

6. Griffin Pipe shall certify compliance with the provisions of this administrative consent order as part of Griffin Pipe's compliance certification obligations pursuant to its Title V Operating permit for this facility;

7. Griffin Pipe shall notify the DNR in writing at least 60 days prior to the date the Facility resumes operations and thereafter shall notify the DNR in writing within 14 days of suspending plant operations;

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**ATTACHMENT A**

8. In the event Griffin Pipe opts to proceed with the implementation of the control measures contained in Attachment B, Griffin Pipe shall notify the DNR in writing at least 180 days prior to implementing the control measures in Attachment B. The notification shall include complete construction permit applications that incorporate the conditions in Attachment B;

9. Nothing in this order shall excuse Griffin Pipe from compliance with any applicable law.

**VI. WAIVER OF APPEAL RIGHTS**

This administrative consent order is entered into knowingly by and with the consent of Griffin Pipe. For that reason, Griffin Pipe waives the right to appeal this administrative consent order.

**VII. NONCOMPLIANCE**

Failure to comply with this administrative consent order may result in the imposition of administrative penalties or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146.

**VIII. TERMINATION OF THIS ADMINISTRATIVE CONSENT ORDER**

A termination of this administrative consent order shall not occur unless: (1) this administrative consent order is superseded; (2) construction permits, with equivalent or more stringent requirements than those listed in either of the attachments to this administrative consent order, have been issued, construction is completed, and all construction permits respecting such requirements have been incorporated into the Iowa SIP and approved by US EPA; or (3) the Facility is permanently closed and all permits have been rescinded.

\_\_\_\_\_ Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2014.  
 Chuck Gipp, Director  
 Iowa Department of Natural Resources

\_\_\_\_\_ Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2014.  
 | Name, Title  
 GRIFFIN PIPE PRODUCTS CO., LLC

#78-01-012; Matthew Johnson, DNR Air Quality; Jim McGraw, DNR Air Quality;  
 Anne Preziosi

**Plant Name:** Griffin Pipe Products Company  
**Equipment Location:** 2601 9<sup>th</sup> Avenue  
 Council Bluffs, Iowa 51501  
**Plant Number:** 78-01-012

The following emission units shall conform to the requirements specified in condition A-1:

**A-1. Emission Unit Description**

| Emission Unit                           | Maximum Rated Capacity | Control Equipment   |
|-----------------------------------------|------------------------|---------------------|
| Cupola (EU-1)                           | 60 Tons/hr             | Baghouse (CE-10)    |
| Desulfurization (EU-2)                  | 60 Tons/hr             | Baghouse (CE-11)    |
| Bull Ladle (EU-3)                       | 60 Tons/hr             |                     |
| Magnesium Inoculation (EU-4)            | 60 Tons/hr             | None                |
| Small Diameter Casting (EU-6)           | 60 Tons/hr             |                     |
| Desulfurization (EU-2)-Uncaptured       | 60 Tons/hr             | None                |
| Bull Ladle (EU-3)-Uncaptured            | 60 Tons/hr             |                     |
| Magnesium Inoculation (EU-4)-Uncaptured | 60 Tons/hr             | None                |
| Large Diameter Casting (EU-29)          | 40 Tons/hr             | None                |
| Cupola Charge Handling (EU-17)          | 60 Tons/hr             | None                |
| Traffic Pathways                        | NA                     | Paved Road Sweeping |

**A-2. Lead (Pb) Emission Limits**

The following lead (Pb) emission limits shall not be exceeded:

| Source Description                      | EP ID  | lb/hr <sup>1</sup>   | tons/yr <sup>2</sup> | Additional Limits | Justification       |
|-----------------------------------------|--------|----------------------|----------------------|-------------------|---------------------|
| Cupola (EU-1)                           | EP-2A  | 0.282 <sup>3</sup>   | NA                   | NA                | RACT                |
|                                         |        | 0.046 <sup>4</sup>   | NA                   | NA                | See Note 4          |
| Desulfurization (EU-2)                  | EP-3   | 0.0018 <sup>3</sup>  | NA                   | NA                | RACT                |
| Bull Ladle (EU-3)                       |        |                      |                      |                   |                     |
| Magnesium Inoculation (EU-4)            |        |                      |                      |                   |                     |
| Magnesium Inoculation-Uncaptured (EU-4) | EP-7A  | 0.0026 <sup>3</sup>  | NA                   | NA                | RACT                |
| Ladle Preheat-Uncaptured (EU-19)        |        |                      |                      |                   |                     |
| Desulfurization-Uncaptured (EU-2)       | EP-7B  | 0.0372 <sup>3</sup>  | NA                   | NA                | RACT                |
| Bull Ladle-Uncaptured (EU-3)            |        |                      |                      |                   |                     |
| Small Diameter Casting (EU-6)           |        |                      |                      |                   |                     |
| Small Diameter Casting (EU-6)           |        |                      |                      |                   |                     |
| Building Emissions                      | EP-6A  | 0.0043 <sup>3</sup>  | NA                   | NA                | RACT                |
|                                         | EP-6B  | 0.0025 <sup>3</sup>  | NA                   | NA                | RACT                |
| Large Diameter Casting (EU-29)          | EP-29  | 0.0025 <sup>3</sup>  | NA                   | NA                | RACT                |
|                                         | EP-29A |                      |                      |                   |                     |
| Cupola Charge Handling (EU-17)          | FUG1   | 0.00143 <sup>3</sup> | NA                   | NA                | RACT                |
| Traffic Pathways                        | NA     | NA                   | 5                    | 6                 | RACT,<br>23.3(2)"c" |

<sup>1</sup> The emission limit is expressed as the average of three (3) runs.

<sup>2</sup> The emission limit is a twelve (12) month rolling total.

<sup>3</sup> The lead limit is established to address the nonattainment designation for a portion of Pottawattamie County published in the Federal Register (76 FR 72097) on November 22, 2011.

<sup>4</sup> The lead limit is an applicable requirement established in a federally enforceable Consent Decree entered in *United States v. Griffin Pipe Products Co., LLC*, (Civil Action No. 1:14-cv-00027-JAJ-RAW)

<sup>5</sup> The lead limit is established at 0.002 tons of lead per rolling 3-month total; that correlates to a lead silt loading content of 0.00016 g/m<sup>2</sup> and maximum potential operation (all raw material/product is shipped or received by truck). The lead limit is based on 95% reduction over baseline lead levels and is established to address the nonattainment designation for a portion of Pottawattamie County published in the Federal Register (76 FR 72097) on November 22, 2011.

<sup>6</sup> The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

**A-3. Emission Point Characteristics**

These emission points shall conform to the specifications listed below:

| EP ID  | Stack Height, Feet | Discharge Style       | Stack Opening, inches |
|--------|--------------------|-----------------------|-----------------------|
| EP-2A  | 100                | Vertical Unobstructed | 80 diameter           |
| EP-3   | 100                | Vertical Unobstructed | 72 diameter           |
| EP-7A  | 49                 | Vertical Unobstructed | 122 diameter          |
| EP-7B  | 49                 | Vertical Unobstructed | 122 diameter          |
| EP-6A  | 49                 | Vertical Unobstructed | 80 diameter           |
| EP-6B  | 49                 | Vertical Unobstructed | 80 diameter           |
| EP-29  | 48                 | Vertical Unobstructed | 72 x 72               |
| EP-29A | 48                 | Vertical Unobstructed | 72 x 72               |

**A-4. Lead (Pb) Compliance Demonstration(s)**

| Emission Point ID | Compliance Demonstration | Compliance Methodology           | Frequency                         |
|-------------------|--------------------------|----------------------------------|-----------------------------------|
| EP-2A             | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-3              | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-7A             | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-7B             | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-6A             | Yes                      | Performance Testing              | Once Every 3-years <sup>2</sup>   |
| EP-6B             | Yes                      | Performance Testing              | Once Every 3-years <sup>2,3</sup> |
| EP-29             | Yes                      | Performance Testing <sup>1</sup> | Once Every 3-years <sup>2</sup>   |
| EP-29A            | Yes                      | Performance Testing <sup>1</sup> | Once Every 3-years <sup>2</sup>   |
| FUG1              | Yes                      | Work Practice                    | NA                                |
| Traffic Pathways  | Yes                      | Silt Load Sampling               | Monthly <sup>4</sup>              |

<sup>1</sup> Performance testing for lead shall be conducted on EP-29 and EP-29A simultaneously to demonstrate compliance with emission limit as specified in condition A-2.

<sup>2</sup> Following a written request by Griffin Pipe Products Company and approval by Iowa DNR, the testing frequency may be decreased following initial or subsequent performance testing.

<sup>3</sup> Maximum operating capacity shall be based on the Cupola (EU-1) charge rate.

<sup>4</sup> Following 12 monthly sampling events, based on a written request by Griffin Pipe Products Company and approval by Iowa DNR, the silt loading sampling may be reduced or eliminated.

**Performance Testing Requirements**

If a compliance demonstration specified above is performance testing, the owner or the owner's authorized agent shall verify compliance with the emission limitations contained in Condition A-2 within 6 months after the restart date of the equipment.

If subsequent performance testing is specified above, the owner or the owner's authorized agent shall verify compliance with the emission limitations contained in Condition A-2 according to the frequency and timeframe noted above.

If testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

| Pollutant | Test Run Time | Test Method                                   |
|-----------|---------------|-----------------------------------------------|
| Pb        | 1 hour        | 40 CFR 60, Appendix A, Method 12 or Method 29 |

Each performance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

**A-4. Lead (Pb) Compliance Demonstration(s)** (continued)

Per 567 IAC 25.1(7)“a”, at the Department’s request, for each performance test a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol for each performance test shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner’s intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

**Silt Load Sampling Requirements**

For each sampling event, silt loading sampling shall be done for at least 3 different locations. Sampling shall be completed at locations that are representative of normal conditions and shall not be conducted within 4 hours after paved road sweeping has occurred. The three sampled locations shall then be averaged to determine the silt loading for that month. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples.

The owner or operator shall commence silt load sampling to verify compliance with the haul road operating limitations contained in Condition A-5.L during the first 30-days the facility resumes operations and subsequent sampling of haul road surface silt loading shall be completed on a monthly basis.

After 3 consecutive months of haul road surface silt loading sampling and every month thereafter, the owner or operator shall calculate the 3-month rolling average total silt loading content to determine compliance with the operating limit included in Condition A-5.L. As an alternative, the owner or operator may analyze the samples for lead content and calculate the 3-month rolling average lead silt loading to demonstrate compliance with the pollutant specific operating limit provided in Condition A-5.L.

If the 3-month rolling average silt loading limit is exceeded, the owner or operator shall immediately double the frequency of sweeping. The increased sweeping frequency shall occur until the lead silt loading results are obtained and demonstrate compliance with the 3-month rolling lead silt loading limit provided in Condition A-5.L or until such time as additional silt loading samples demonstrate compliance with the 3-month rolling total silt loading limit provided in Condition A-5.L. The owner or operator shall maintain records onsite that detail the date the measured silt loading exceeded Condition A-5.L, the date in which increased sweeping frequency was enacted and the date that compliance was demonstrated with Condition A-5.L.

The owner or operator shall develop and submit a silt/lead sampling protocol to the Department for approval 30-days prior to resuming operation. The submitted silt/lead sampling protocol shall detail procedures for sample chain of custody, identification, storage, and lead analysis. The approved silt/lead sampling protocol shall be implemented and retained onsite.

**A-5. Operating Limits**

Operating limits shall be:

- A. The production rate shall not exceed 235,150 tons of metal charged per rolling twelve-month period.
- B. All emission units specified in Table 1 below are limited to operating 1,250 hours per rolling 3-month period.

Table 1: Scrap Melting Activities

| <b>Emission Unit</b>                    |
|-----------------------------------------|
| Cupola (EU-1)                           |
| Desulfurization (EU-2)                  |
| Bull Ladle (EU-3)                       |
| Magnesium Inoculation (EU-4)            |
| Small Diameter Casting (EU-6)           |
| Desulfurization (EU-2)-Uncaptured       |
| Bull Ladle (EU-3)-Uncaptured            |
| Magnesium Inoculation (EU-4)-Uncaptured |
| Large Diameter Casting (EU-29)          |
| Cupola Charge Handling (EU-17)          |

- C. The pressure drop across the baghouse (CE-10) shall be between 3.5 to 10.0 inches of water column based on a 5-minute average.
- D. The pressure drop across the baghouse (CE-11) shall be between 3.5 to 10.0 inches of water column based on a 5-minute average.
- E. Maintain Baghouse (CE-10) according to manufacturer specifications and maintenance schedule.
- F. Maintain Baghouse (CE-11) according to manufacturer specifications and maintenance schedule.
- G. The owner or operator shall implement work practice standards as specified in Standard Operating Procedure (SOP) Melt180CB to minimize emissions from Cupola Charge Handling (EU-17).
- H. The owner or operator shall implement the scrap management plan as specified in Standard Operating Procedure (SOP) Melt220CB.
- I. Limit public access. The owner or operator shall restrict public access to the facility at all property boundary lines. The restriction does not apply to company employees, contractors, delivery/shipping personnel, federal, state or local officials, emergency and maintenance service personnel (both private and public section), or others who have a legitimate reason for accessing the property.
- J. Fugitive dust emissions generated from truck traffic on the paved haul roads shall, at a minimum, be controlled by sweeping once per day except as noted in Conditions A-5.J (i) through (iv). All sweeping must be completed using a Tymco DST-4 Sweeper or functionally equivalent sweeper type (as approved by the Department).
  - i. Paved road sweeping shall begin within seven (7) days after resuming operations at Griffin Pipe Products Company (Plant No. 78-01-012).
  - ii. If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
  - iii. Paved road sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, paved road sweeping shall resume within 24-hours after the precipitation event has ended.
  - iv. Paved road sweeping need not occur when the facility experiences no production or shipping activities on that calendar day.

#### A-5. Operating Limits (continued)

- K. If sweeping cannot be accomplished for the entire month due to ambient temperatures or hazardous weather, silt load testing is not required for that month.
- L. The haul road surface total silt loading or lead silt loading shall not exceed 0.64 g/m<sup>2</sup> or 0.00016 g/m<sup>2</sup>, respectively, based on a 3-month rolling average.
- M. Bulk material shipments or deliveries of product, waste and raw materials shall only occur from 7 am to 5 pm daily.
- N. Best Management Practices (BMP) – The owner or operator shall implement “good housekeeping” or best management practices to minimize fugitive emissions. Such practices include but are not limited to:
  - i. Clean up spills of lead containing raw materials on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing emissions.
  - ii. Clean areas where lead containing materials are processed and where lead containing dust may be generated such as scrap melting areas in a manner consistent with minimizing fugitive lead emissions.
  - iii. Post and maintain speed limit (15 mph) signs.
  - iv. Clean up of possible lead containing materials (i.e. baghouse dust) around the cupola and desulfurization baghouse buildings.
- O. Contingency Measures
  - i. After November 30, 2014, the owner or operator shall increase the frequency of cleaning/sweeping of the haul roads to twice per day within seven (7) days after notification by the Department that a monitored exceedance of the lead NAAQS occurred. The owner or operator shall also submit sweeping data to the Department and continue daily cleaning/sweeping until notified by the Department that a different cleaning/sweeping frequency shall be used.
  - ii. If a monitored exceedance of the lead NAAQS occurs during months in which the inclement weather provision as specified in condition A-5.J.ii applied, the inclement weather provisions, and condition A-5.K, shall be reevaluated by the Department and Griffin Pipe shall submit an emissions evaluation meeting the criteria and timeline as specified by the Department. If the reevaluation indicates that the implementation of the inclement weather provisions in conditions A-5.J.ii and A-5.K contributed to the monitored exceedance of the lead NAAQS then the Department shall modify these provisions to prevent future exceedances of the lead NAAQS.
  - iii. If a monitored exceedance of the lead NAAQS occurs after the provisions of Condition A-5.O.i have been implemented for three (3) full calendar months the owner or operator will submit an emissions evaluation meeting the criteria and timeline specified by the Department.

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#### A-6. Operating Condition Monitoring and Recordkeeping

Unless specified by a federal regulation, all records shall be kept on-site (in hardcopy or electronic form) for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The cumulative tons of metal charged on a rolling-12-month total for each month of operation.
- B. Record on a monthly basis, the number of hours that Cupola (EU-1) is operated. Calculate and record 3-month rolling totals.
- C. Calculate and record the average pressure drop across the baghouse (CE-10) in inches of water column. The average pressure drop shall be expressed and recorded as the average of all pressure drop data measured during each 5-minute period.
- D. Calculate and record the average pressure drop across the baghouse (CE-11) in inches of water column. The average pressure drop shall be expressed and recorded as the average of all pressure drop data measured during each 5-minute period.

- E. Maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Baghouse (CE-10).
- F. Maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Baghouse (CE-11).
- G. Retain on-site a copy of Standard Operating Procedure (SOP) Melt180CB and all records required by the plan to minimize emissions from Cupola Charge Handling (EU-17).

#### A-6. Operating Condition Monitoring and Recordkeeping (continued)

- H. Retain on-site a copy of the approved Standard Operating Procedure (SOP) Melt220CB and all records required by the plan.
  - I. The owner or operator shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
  - J. The owner or operator shall record daily the date and time of bulk raw material, waste material and product received or shipped via truck.
  - K. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
    - i. The date and time that sweeping was conducted;
    - ii. The date and time of silt load sampling event;
    - iii. The location of the sample taken;
    - iv. The measured silt content in grams;
    - v. Sample area used for silt load sampling in meters; and,
    - vi. The operator's initials.
  - L. The owner or operator shall maintain a record of the 3-month rolling average of each monthly average sampling event in g/m<sup>2</sup> to determine compliance with Condition A-5.L.
  - M. Prior to resuming facility operations the owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition A-5.N. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
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# ATTACHMENT B

**Plant Name:** Griffin Pipe Products Company  
**Equipment Location:** 2601 9<sup>th</sup> Avenue  
Council Bluffs, Iowa 51501  
**Plant Number:** 78-01-012

The following emission units shall conform to the requirements specified in condition B-1:

### B-1. Emission Unit Description

| Emission Unit                           | Maximum Rated Capacity | Control Equipment   |
|-----------------------------------------|------------------------|---------------------|
| Cupola (EU-1)                           | 60 Tons/hr             | Baghouse (CE-10)    |
| Desulfurization (EU-2)                  | 60 Tons/hr             | Baghouse (CE-11)    |
| Bull Ladle (EU-3)                       | 60 Tons/hr             |                     |
| Magnesium Inoculation (EU-4)            | 60 Tons/hr             | None                |
| Small Diameter Casting (EU-6)           | 60 Tons/hr             |                     |
| Desulfurization (EU-2)-Uncaptured       | 60 Tons/hr             | Baghouse (CE-12)    |
| Bull Ladle (EU-3)-Uncaptured            | 60 Tons/hr             |                     |
| Magnesium Inoculation (EU-4)-Uncaptured | 60 Tons/hr             | None                |
| Large Diameter Casting (EU-29)          | 40 Tons/hr             | None                |
| Cupola Charge Handling (EU-17)          | 60 Tons/hr             | None                |
| Traffic Pathways                        | NA                     | Paved Road Sweeping |

### B-2. Lead (Pb) Emission Limits

The following lead (Pb) emission limits shall not be exceeded:

| Source Description                       | EP ID  | lb/hr <sup>1</sup>   | tons/yr <sup>2</sup> | Additional Limits | Justification    |
|------------------------------------------|--------|----------------------|----------------------|-------------------|------------------|
| Cupola (EU-1)                            | EP-2A  | 0.282 <sup>3</sup>   | NA                   | NA                | RACT             |
|                                          |        | 0.046 <sup>4</sup>   | NA                   | NA                | See Note 4       |
| Desulfurization (EU-2)                   | EP-3   | 0.02 <sup>3</sup>    | NA                   | NA                | RACT             |
| Bull Ladle (EU-3)                        |        |                      |                      |                   |                  |
| Magnesium Inoculation (EU-4)             | EP-7A  | 0.0075 <sup>3</sup>  | NA                   | NA                | RACT             |
| Ladle Preheat-Uncaptured (EU-19)         |        |                      |                      |                   |                  |
| Desulfurization-Secondary Capture (EU-2) | EP-7B  | 0.0025 <sup>3</sup>  | NA                   | NA                | RACT             |
| Bull Ladle-Secondary Capture (EU-3)      |        |                      |                      |                   |                  |
| Small Diameter Casting (EU-6)            | EP-6A  | 0.0043 <sup>3</sup>  | NA                   | NA                | RACT             |
| Small Diameter Casting (EU-6)            |        |                      |                      |                   |                  |
| Building Emissions                       | EP-6B  | 0.0015 <sup>3</sup>  | NA                   | NA                | RACT             |
| Large Diameter Casting (EU-29)           | EP-29  | 0.0025 <sup>3</sup>  | NA                   | NA                | RACT             |
|                                          | EP-29A |                      |                      |                   |                  |
| Cupola Charge Handling (EU-17)           | FUG1   | 0.00143 <sup>3</sup> | NA                   | NA                | RACT             |
| Traffic Pathways                         | NA     | NA                   | <sup>5</sup>         | <sup>6</sup>      | RACT, 23.3(2)"c" |

<sup>1</sup> The emission limit is expressed as the average of three (3) runs.

<sup>2</sup> The emission limit is a twelve (12) month rolling total.

<sup>3</sup> The lead limit is established to address the nonattainment designation for a portion of Pottawattamie County published in the Federal Register (76 FR 72097) on November 22, 2011.

<sup>4</sup> The lead limit is an applicable requirement established in a federally enforceable Consent Decree entered in United States v. Griffin Pipe Products Co., LLC, (Civil Action No. 1:14-cv-00027-JAJ-RAW)

<sup>5</sup> The lead limit is established at 0.004 tons of lead per rolling 3-month total; that correlates to a lead silt loading content of 0.00032 g/m<sup>2</sup> and maximum potential operation (all raw material/product is shipped or received by truck). The lead limit is based on 90% reduction over baseline lead levels and is established to address the nonattainment designation for a portion of Pottawattamie County published in the Federal Register (76 FR 72097) on November 22, 2011.

<sup>6</sup> The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

**B-3. Emission Point Characteristics**

These emission points shall conform to the specifications listed below:

| EP ID  | Stack Height, Feet | Discharge Style       | Stack Opening, inches |
|--------|--------------------|-----------------------|-----------------------|
| EP-2A  | 100                | Vertical Unobstructed | 80 diameter           |
| EP-3   | 100                | Vertical Unobstructed | 72 diameter           |
| EP-7A  | 49                 | Vertical Unobstructed | 122 diameter          |
| EP-7B  | 100                | Vertical Unobstructed | 68 diameter           |
| EP-6A  | 49                 | Vertical Unobstructed | 80 diameter           |
| EP-6B  | 49                 | Vertical Unobstructed | 80 diameter           |
| EP-29  | 48                 | Vertical Unobstructed | 72 x 72               |
| EP-29A | 48                 | Vertical Unobstructed | 72 x 72               |

**B-4. Lead (Pb) Compliance Demonstration(s)**

| Emission Point ID | Compliance Demonstration | Compliance Methodology           | Frequency                         |
|-------------------|--------------------------|----------------------------------|-----------------------------------|
| EP-2A             | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-3              | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-7A             | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-7B             | Yes                      | Performance Testing              | Annual <sup>2</sup>               |
| EP-6A             | Yes                      | Performance Testing              | Once Every 3-years <sup>2</sup>   |
| EP-6B             | Yes                      | Performance Testing              | Once Every 3-years <sup>2,3</sup> |
| EP-29             | Yes                      | Performance Testing <sup>1</sup> | Once Every 3-years <sup>2</sup>   |
| EP-29A            | Yes                      | Performance Testing <sup>1</sup> | Once Every 3-years <sup>2</sup>   |
| FUG1              | Yes                      | Work Practice                    | NA                                |
| Traffic Pathways  | Yes                      | Silt Load Sampling               | Monthly <sup>4</sup>              |

<sup>1</sup> Performance testing for lead shall be conducted on EP-29 and EP-29A simultaneously to demonstrate compliance with emission limit as specified in condition B-2.

<sup>2</sup> Following a written request by Griffin Pipe Products Company and approval by Iowa DNR, the testing frequency may be decreased following initial or subsequent performance testing.

<sup>3</sup> Maximum operating capacity shall be based on the Cupola (EU-1) charge rate.

<sup>4</sup> Following 12 monthly sampling events, based on a written request by Griffin Pipe Products Company and approval by Iowa DNR, the silt loading sampling may be reduced or eliminated.

**Performance Testing Requirements**

If an initial compliance demonstration specified above is performance testing, the owner or the owner’s authorized agent shall verify compliance with the emission limitations contained in Condition B-2 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the equipment.

If subsequent performance testing is specified above, the owner or the owner’s authorized agent shall verify compliance with the emission limitations contained in Condition B-2 according to the frequency and timeframe noted above.

If testing is required, the owner or the owner’s authorized agent shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

| Pollutant | Test Run Time | Test Method                                   |
|-----------|---------------|-----------------------------------------------|
| Pb        | 1 hour        | 40 CFR 60, Appendix A, Method 12 or Method 29 |

**B-4. Lead (Pb) Compliance Demonstration(s) (continued)**

Each performance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)“a”, at the Department’s request, for each performance test a pretest meeting shall be held no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol for each performance test shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner’s intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

**Silt Load Sampling Requirements**

For each sampling event, silt loading sampling shall be done for at least 3 different locations. Sampling shall be completed at locations that are representative of normal conditions and shall not be conducted within 4 hours after paved road sweeping has occurred. The three sampled locations shall then be averaged to determine the silt loading for that month. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples.

The owner or operator shall commence silt load sampling to verify compliance with the haul road operating limitations contained in Condition B-5.M during the first 30-days the facility resumes operations and subsequent sampling of haul road surface silt loading shall be completed on a monthly basis.

After 3 consecutive months of haul road surface silt loading sampling and every month thereafter, the owner or operator shall calculate the 3-month rolling average total silt loading content to determine compliance with the operating limit included in Condition B-5.M. As an alternative, the owner or operator may analyze the samples for lead content and calculate the 3-month rolling average lead silt loading to demonstrate compliance with the pollutant specific operating limit provided in Condition B-5.M.

If the 3-month rolling average silt loading limit is exceeded, the owner or operator shall immediately double the frequency of sweeping. The increased sweeping frequency shall occur until the lead silt loading results are obtained and demonstrate compliance with the 3-month rolling lead silt loading limit provided in Condition B-5.M or until such time as additional silt loading samples demonstrate compliance with the 3-month rolling total silt loading limit provided in Condition B-5.M. The owner or operator shall maintain records onsite that detail the date the measured silt loading exceeded Condition B-5.M, the date in which increased sweeping frequency was enacted and the date that compliance was demonstrated with Condition B-5.M.

The owner or operator shall develop and submit a silt/lead sampling protocol to the Department for approval 30-days prior to resuming operation. The submitted silt/lead sampling protocol shall detail procedures for sample chain of custody, identification, storage, and lead analysis. The approved silt/lead sampling protocol shall be implemented and retained onsite.

### B-5. Operating Limits

Operating limits shall be:

- A. The production rate shall not exceed 235,150 tons of metal charged per rolling twelve-month period.
- B. The pressure drop across the baghouse (CE-10) shall be between 3.5 to 10.0 inches of water column based on a 5-minute average.
- C. The pressure drop across the baghouse (CE-11) shall be between 3.5 to 10.0 inches of water column based on a 5-minute average.
- D. The pressure drop across the baghouse (CE-12) shall be between 3.5 to 10.0 inches of water column based on a 5-minute average.
- E. Maintain Baghouse (CE-10) according to manufacturer specifications and maintenance schedule.
- F. Maintain Baghouse (CE-11) according to manufacturer specifications and maintenance schedule.
- G. Maintain Baghouse (CE-12) according to manufacturer specifications and maintenance schedule.
- H. The owner or operator shall implement work practice standards as specified in Standard Operating Procedure (SOP) Melt180CB to minimize emissions from Cupola Charge Handling (EU-17).
- I. The owner or operator shall implement the scrap management plan as specified in Standard Operating Procedure (SOP) Melt220CB.
- J. Limit public access. The owner or operator shall restrict public access to the facility at all property boundary lines. The restriction does not apply to company employees, contractors, delivery/shipping personnel, federal, state or local officials, emergency and maintenance service personnel (both private and public section), or others who have a legitimate reason for accessing the property.
- K. Fugitive dust emissions generated from truck traffic on the paved haul roads shall, at a minimum, be controlled by:
  - i. Sweeping 3 times a week when the haul roads are used six (6) days in a week, with a maximum of one day between sweeping events except as noted in Conditions B-5.K (iii) through (vi). All sweeping must be completed using a Tymco DST-4 Sweeper or functionally equivalent sweeper type (as approved by the Department).
  - ii. Sweeping 4 times a week when the haul roads are used seven (7) days in a week except as noted in Conditions B-5.K (iii) through (vi). All sweeping must be completed using a Tymco DST-4 Sweeper or functionally equivalent sweeper type (as approved by the Department).
  - iii. Paved road sweeping shall begin within seven (7) days after resuming operations at Griffin Pipe Products Company (Plant No. 78-01-012).
  - iv. If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
  - v. Paved road sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, paved road sweeping shall resume within 24-hours after the precipitation event has ended.
  - vi. Paved road sweeping need not occur when the facility experiences no production or shipping activities on that calendar day.
- L. If sweeping cannot be accomplished for the entire month due to ambient temperatures or hazardous weather, silt load testing is not required for that month.
- M. The haul road surface total silt loading or lead silt loading shall not exceed 1.28 g/m<sup>2</sup> or 0.00032 g/m<sup>2</sup>, respectively, based on a 3-month rolling average.

### B-5. Operating Limits (continued)

- N. Best Management Practices (BMP) – The owner or operator shall implement “good housekeeping” or best management practices to minimize fugitive emissions. Such practices include but are not limited to:
  - i. Clean up spills of lead containing raw materials on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing emissions.
  - ii. Clean areas where lead containing materials are processed and where lead containing dust may be generated such as scrap melting areas in a manner consistent with minimizing fugitive lead emissions.
  - iii. Post and maintain speed limit (15 mph) signs.
  - iv. Clean up of possible lead containing materials (i.e. baghouse dust) around the cupola and desulfurization baghouse buildings.
- O. Contingency Measures
  - i. After November 30, 2014, the owner or operator shall increase the frequency of cleaning/sweeping of the haul roads to once per day within seven (7) days after notification by the Department that a monitored exceedance of the lead NAAQS occurred. The owner or operator shall also submit sweeping data to the Department and continue daily cleaning/sweeping until notified by the Department that a different cleaning/sweeping frequency shall be used.
  - ii. If a monitored exceedance of the lead NAAQS occurs during months in which the inclement weather provision as specified in condition B-5.K.iv applied, the inclement weather provisions, and condition B-5.L, shall be reevaluated by the Department and Griffin Pipe shall submit an emissions evaluation meeting the criteria and timeline as specified by the Department. If the reevaluation indicates that the implementation of the inclement weather provisions in conditions B-5.K.iv and B-5.L contributed to the monitored exceedance of the lead NAAQS then the Department shall modify these provisions to prevent future exceedances of the lead NAAQS.
  - iii. If a monitored exceedance of the lead NAAQS occurs after the provisions of Condition B-5.O.i have been implemented for three (3) full calendar months the owner or operator will submit an emissions evaluation meeting the criteria and timeline specified by the Department.

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### B-6. Operating Condition Monitoring and Recordkeeping

Unless specified by a federal regulation, all records shall be kept on-site (in hardcopy or electronic form) for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The cumulative tons of metal charged on a rolling-12-month total for each month of operation.
- B. Calculate and record the average pressure drop across the baghouse (CE-10) in inches of water column. The average pressure drop shall be expressed and recorded as the average of all pressure drop data measured during each 5-minute period.
- C. Calculate and record the average pressure drop across the baghouse (CE-11) in inches of water column. The average pressure drop shall be expressed and recorded as the average of all pressure drop data measured during each 5-minute period.
- D. Calculate and record the average pressure drop across the baghouse (CE-12) in inches of water column. The average pressure drop shall be expressed and recorded as the average of all pressure drop data measured during each 5-minute period.
- E. Maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Baghouse (CE-10).
- F. Maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Baghouse (CE-11).

- G. Maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Baghouse (CE-12).
- H. Retain on-site a copy of Standard Operating Procedure (SOP) Melt180CB and all records required by the plan to minimize emissions from Cupola Charge Handling (EU-17).
- I. Retain on-site a copy of the approved Standard Operating Procedure (SOP) Melt220CB and all records required by the plan.

**B-6. Operating Condition Monitoring and Recordkeeping (continued)**

- J. The owner or operator shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
  - K. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
    - i. The date and time that sweeping was conducted;
    - ii. The date and time of silt load sampling event;
    - iii. The location of the sample taken;
    - iv. The measured silt content in grams;
    - v. Sample area used for silt load sampling in meters; and,
    - vi. The operator's initials.
  - L. The owner or operator shall maintain a record of the 3-month rolling average of each monthly average sampling event in  $g/m^2$  to determine compliance with Condition B-5.M.
  - M. Prior to resuming facility operations the owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition B-5.N. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- 

**B-1. Griffin Pipe's Melt180CB & Melt220CB Standard Operating Procedures**  
These documents are referenced by, but not directly appended to, the ACO.



# GRIFFIN PIPE PRODUCTS CO.

## COUNCIL BLUFFS PLANT

### STANDARD OPERATING PROCEDURE

**Title:** Scrap Inspection & Charge Handling      **Instruction #:** Melt180CB      Page 1 of 4  
**Issue Date:**      **Revision #:** 3      **Date:** 10-20-2014

#### 1.0 SCOPE

This work instruction describes the steps taken when inspecting scrap for cupola melting and for handling of the cupola charge in such a manner as to minimize fugitive dust emissions.

#### 2.0 EQUIPMENT

- (1) Proper safety equipment including hardhat, ear and eye protection and steel-toed boots with metatarsal guard.
- (2) Radiation Detector Handheld (Backup)
- (3) Radiation Detector Fixed Mount
- (4) S-101CB Shredded Scrap (Frag) -Latest Revision
- (5) S-102CB No. 2 Steel Scrap- Latest Revision
- (6) Melt180CB-1 Scrap Inspection Checklist-Latest Revision
- (7) Supplier Incident Report- F-741002
- (8) Iowa DNR- RADIOACTIVE MATERIAL DETECTION SYSTEMS FOR SCRAP METAL FACILITIES REGULATORY GUIDE Rev 7/1/05
- (9) 0.25 $\mu$  Radiation Test puck

#### 3.0 GENERAL REQUIREMENTS FOR SCRAP INSPECTION & CHARGE HANDLING

- (1) **Caution** must always be exercised when walking on railcars and entering into the scrap yard. Ensure the crane operators are aware of your intentions to enter the scrap yard.
- (2) All personnel to inspect loads are required to be trained on all of the requirements of this procedure and with the S-101CB Shredded and S-102CB No. 2 Steel Scrap Specifications
- (3) Inspection Personnel are required to fill out the Melt180CB-1 Scrap Inspection Checklist.
- (4) Purchasing issues supplier numbers specific to each yard and this will be recorded to ensure traceability of materials. Record this number on Melt 180CB-1 Scrap Inspection Checklist
- (5) Crane operators must be aware at all times of other people, vehicles, and equipment that may be present in the scrap yard for short durations
- (6) Crane operators will only move scrap metal with a scrap magnet



# GRIFFIN PIPE PRODUCTS CO.

## COUNCIL BLUFFS PLANT

### STANDARD OPERATING PROCEDURE

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#### 4.0 INSTRUCTIONS FOR SCRAP INSPECTION OF TRUCKS

- (1) All trucks must pass thru the radiation detector located in the shipping area. Max speed is 3mph.  
If radiation detector goes off, contact maintenance to verify the operation of the detector. Test the detector using 0.25 $\mu$  test puck. Retest the truck as needed. Load can be verified with hand held unit. If radiation is still present reject the entire load. **Do not dump any rejected loads to search for source of radiation.**
- (2) Visual inspection for non-conforming products on the load can be done by any trained personnel this is typically done by the crane operator.
- (3) Crane operator will clean the area for unloading then authorize the driver to dump the truckload.
- (4) Once dumped on the ground visual inspection for any non-conforming products is done. Once placed continue to check the load by inspecting the material as it is handled by the magnet. Inspect the ground carefully when cleaning up as this is when nonmagnetic contamination will be readily visible
- (5) Notify supervision and purchasing department of non-conformance following Supplier Incident Reporting.

#### 5.0 INSTRUCTIONS FOR RAILCAR INSPECTION

- (1) All railcars are radiation detected by the as they cross the scale. The top of all railcars are visually inspected for non-conforming products via cameras located in the storeroom office.
  - i. If manual inspection of the railcar is necessary, contact the crane operators and/or engine operators so that they are aware of you intention to check the railcar. Climb the railcar ladder and visually inspect the top surface for non-conforming product.
  - ii. If fixed mount radiation detector is inoperable the handheld unit will be used to scan all the railcars in the lineup
- (2) Once placed in the lineup continue to check the railcar by inspecting the material as it is handled by the magnet. Also use the mirror on crane to inspect the car carefully when empty as this is when nonmagnetic contamination will be readily visible.
- (3) Notify supervision and purchasing department of non-conformance following Supplier Incident Reporting.

#### 6.0 INSTRUCTION FOR SCRAP DOCUMENTATION

- (1) Document time of load, scrap supplier, and trucking company or railcar # and initial sheet for all loads that are rejected on form Melt180CB-1.



**GRIFFIN PIPE PRODUCTS CO.**  
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- i. Any loads rejected for mercury, lead, and VOC containing products are documented by rating Zero (0) the Environment section of Melt180CB-1.
- ii. Notify supervision, purchasing and the environmental department of the non-conforming product.
- (2) Sizing-This is any material that does not meet requirement of S-101 or S-102 that are excessively large, heavy, or small and low density.
- (3) Chemistry-This is any materials that visually or chemically when melted do not meet the requirements of S-101 or S-102 Such as elevated Cr, Cu, Sn - Stainless materials and brasses etc.
- (4) Environmental-These are items that do not meet environmental requirements such as Pb limits, mercury switches, Zinc plated and radiation, excess dirt, debris, fines, etc.
- (5) Waste- These are materials that are not to be placed in the cupola and include excess rust fines and non-ferrous materials such as wood, plastic, garbage, dirt and mud etc.
- (6) Each inspection category should be rated using the following guidelines.
  - i. (2) No visible non-conformance is seen score as a two (2)
  - ii. (1) Minor visible non-conformance material that can be see and can be removed without hindering operations, score this as one(1)
  - iii. (0) Excessive visible non-conformance seen, score this as (0)
  - iv. Combine these scores to create a total score. Any rejected load will score a total score of Zero (0) even if other areas meet requirements.
  - v. Chemistry scores may be adjusted down after melting the load results in iron with chemistry above acceptance limits.
- (7) Notify Supervisor, Purchasing and the Environmental Engineer to all Zero Ratings as soon as practical.
- (8) Forward completed forms to purchasing will compile ratings of specific yards into a database and create a feedback report to maintain control of incoming materials.
  - i. Any supplier with a total score of 4-5 will be notified of potential rejection and potential disqualification.
  - ii. Two loads receiving a zero score in one month period is cause for disqualifications an approved supplier.
- (9) A Supplier Incident Report (SIR) is to be completed for non-conforming products. A formal Corrective Action Request (CAR) will be done for major SIR (i.e. a rejection of a load score of Zero (0)) or a supplier has more than three environmental SIR in a year period. Purchases from that supplier will be limited until the CAR is completed to GPP satisfaction.



**GRIFFIN PIPE PRODUCTS CO.**  
**COUNCIL BLUFFS PLANT**  
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**Title:** Scrap Inspection & Charge Handling      **Instruction #:** Melt180CB      Page 4 of 4  
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**7.0 INSTRUCTIONS FOR CHARGE HANDLING**

Fugitive dust emissions associated with charge handling shall be minimized by the following

- (1) All scrap metal will be handled with a scrap magnet in order to minimize non-ferrous materials and fines in the charge makeup
- (2) Crane operators will minimize the height from which scrap is dropped when unloading railcars, while loading scrap into the weight hopper and skip hoist, and at other times when scrap is being moved within the scrapyard
- (3) As necessary, the scrap truck dump area on the east side of the scrap yard will be cleared using the front-end loader to push the scrap west onto the main scrap pile.
- (4) The scrap truck dump area will be periodically cleaned of fines from dirt, dust, and rust by means of scraping the area with the front-end loader. Materials collected from this cleanup will be placed in the lime shed for proper disposal.
- (5) Plant scrap specifications shall limit the amount of fines, dirt, mud and other fine particulate matter in the scrap
- (6) A four-sided enclosure shall be maintained around the bottom position of the skip hoist as a means to minimize emissions when scrap is dropped from the weight hopper into the skip hoist

**8.0 REVISION LOG**

| Date       | Revision # | Description                                                                                         |
|------------|------------|-----------------------------------------------------------------------------------------------------|
| 2/22/2011  | 1          | Testing for radiation at shipping. Inspection and reporting non-compliant product. Wording changes. |
| 04/08/2013 | 2          | Wording change and clarified changes in daily inspection sheet 180CB-1                              |
| 10/20/2014 | 3          | Updated to cover Change Handling procedures with minor updated to other sections                    |
|            |            |                                                                                                     |

**9.0 REVIEW AND APPROVAL**

Jeff Suing      10/21/2014  
 Production Superintendent      Date

Douglas Brunow      10/21/2014  
 Operations Manager      Date



# Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

**Firm:** Alter Metal Recycling

**Contact:**

Ryan Carpenter  
Reg. Env. Manager  
  
(314) 346-6795

**Responsible Party:**

Sarah Schlichtholz  
Dir. Environmental Affairs

2603 9<sup>th</sup> Avenue  
Council Bluffs, IA 51501

## Permitted Equipment

**Emission Unit(s):** Fugitive Dust Emissions from Truck Traffic (EU-Hauling)

**Control Equipment:** Paved Road Sweeping w/ Water Suppression

**Emission Point:** EP-1

**Equipment Location:** 2603 9<sup>th</sup> Avenue  
Council Bluffs, IA 51501

**Plant Number:** 78-01-043

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

| Permit No. | Proj. No. | Description     | Date     | Stack Testing |
|------------|-----------|-----------------|----------|---------------|
| 14-A-521   | 14-126    | Original Permit | 09/02/14 | No            |

Under the Direction of the Director of  
the Department of Natural Resources

## PERMIT CONDITIONS

### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

### 2. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

### 3. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified in writing at least seven (7) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given fourteen (14) days prior to the relocation of equipment<sup>(1)</sup> (See Permit Condition 8.A.2). The owner or operator will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the NAAQS. In such case, a supplemental permit shall be required prior to the initiation of construction of additional control equipment or modifications to equipment needed to meet the standards.

<sup>(1)</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

### 4. Construction

#### A. General Requirements

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

### 4. Construction (Continued)

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:

- (1) the construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
- (3) the construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

#### B. Changes to Plans and Specifications

The owner or operator shall amend this permit or amendment prior to startup of the equipment if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

#### C. Amended Permits

The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:

- (1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
- (2) This current amendment becomes void.

### 5. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part §60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 35.

### 6. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See Permit Condition 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition (See Permit Condition 8.B.2).

**7. Permit Violations**

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and two (2) years in jail according to Iowa Code Section 455B.146A.

**8. Notification, Reporting, and Recordkeeping**

- A. The owner or operator shall furnish the Department the following written notifications:
  - (1) Per 567 IAC 22.3(3)"b":
    - (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
    - (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - (2) Per 567 IAC 22.3(3)"f", when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
    - (a) at least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - (b) at least seven (7) days before equipment relocation.
  - (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall be mailed to:

Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite 1  
Windsor Heights, IA 50324

and include the following information:

- The date of ownership change,
  - The name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and
  - The construction permit number(s) of the equipment changing ownership.
- (4) Unless specified per a federal regulation, notification of each compliance test required by Permit Condition 12 shall be done not less than thirty (30) days before the required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
- the time,
  - the place,
  - the name of the person who will conduct the tests,
  - and other information as required by the Department;

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

- B. The owner or operator shall furnish the Department with the following reports:
  - (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
  - (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
  - (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
  - (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

**8. Notification, Reporting, and Recordkeeping (Continued)**

- (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;

- C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

- D. The owner or operator shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor  
Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite 1  
Windsor Heights, IA 50324  
Telephone: (515) 725-9549  
Fax: (515) 725-9501

- E. The owner or operator shall send correspondence concerning stack testing to:

Stack Testing Coordinator  
Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite 1  
Windsor Heights, IA 50324  
Telephone: (515) 725-9545  
Fax: (515) 725-9502

- F. The owner or operator shall send reports and notifications to:

|                                                                                                                                                                                                         |                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Compliance Unit Supervisor<br>Air Quality Bureau<br>Iowa Department of Natural Resources<br>7900 Hickman Road, Suite 1<br>Windsor Heights, IA 50324<br>Telephone: (515) 725-9550<br>Fax: (515) 725-9502 | IDNR Field Office 4<br>1401 Sunnyside Lane<br>Atlantic, IA 50022<br>Telephone: (712) 243-1934<br>Fax: (712) 243-6251 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|

**9. Appeal Rights**

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

Per 561 IAC 7.4(1), the owner or operator shall file any written notice of appeal within thirty (30) days of receipt of the issued permit. The written notice of appeal shall be filed with the Director of the Department with a copy to the Legal Services Bureau Chief at the following addresses:

|                                                                                                             |                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Director<br>Iowa Department of Natural Resources<br>502 East 9 <sup>th</sup> Street<br>Des Moines, IA 50319 | Bureau Chief<br>Legal Services Bureau<br>Iowa Department of Natural Resources<br>502 East 9 <sup>th</sup> Street<br>Des Moines, IA 50319 |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

**10. Emission Limits**

The following emission limits shall not be exceeded:

| Pollutant                                      | lb/hr <sup>(1)</sup> | tons/yr <sup>(2)</sup> | Additional Limits | Reference (567 IAC) |
|------------------------------------------------|----------------------|------------------------|-------------------|---------------------|
| Particulate Matter (PM) – Federal              | NA                   | NA                     | NA                | NA                  |
| Particulate Matter (PM) – State                | NA                   | NA                     | NA                | NA                  |
| PM <sub>10</sub>                               | NA                   | NA                     | NA                | NA                  |
| PM <sub>2.5</sub>                              | NA                   | NA                     | NA                | NA                  |
| Opacity                                        | NA                   | NA                     | <sup>(3)</sup>    | 23.3(2)"c"          |
| Sulfur Dioxide (SO <sub>2</sub> )              | NA                   | NA                     | NA                | NA                  |
| Nitrogen Oxides (NO <sub>x</sub> )             | NA                   | NA                     | NA                | NA                  |
| Volatile Organic Compounds (VOC)               | NA                   | NA                     | NA                | NA                  |
| Carbon Monoxide (CO)                           | NA                   | NA                     | NA                | NA                  |
| Lead (Pb)                                      | NA                   | NA                     | <sup>(4)</sup>    | NAAQS, RACT         |
| Carbon Dioxide equivalents (CO <sub>2</sub> e) | NA                   | NA                     | NA                | NA                  |
| Single HAP                                     | NA                   | NA                     | NA                | NA                  |
| Total HAP                                      | NA                   | NA                     | NA                | NA                  |

<sup>(1)</sup> The emission limit is expressed as the average of three (3) runs.

<sup>(2)</sup> The emission limit is a twelve (12) month rolling total.

<sup>(3)</sup> The owner/operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

<sup>(4)</sup> The lead limit is established at 0.01 tons of lead per rolling 3-month average; that correlates to a lead silt content of 0.00281 g/m<sup>3</sup> and maximum potential operation (all raw material/product is shipped or received by truck). The lead limit is based on 95% reduction over baseline lead levels and is established to address the nonattainment designation for a portion of Pottawattamie County published in the Federal Register (76 FR 72097) on November 22, 2011. The compliance demonstration with this lead limit is based on maximum silt content, operating restrictions and work practice standards as specified in Conditions 14 and 15. Total silt load content of 2.7 g/m<sup>2</sup> has been established as a surrogate for total lead silt content.

**11. Emission Point Characteristics**

This emission point shall conform to the specifications listed below:

| Parameter                           | Value |
|-------------------------------------|-------|
| Stack Height, (ft. from the ground) | NA    |
| Discharge Style                     | NA    |
| Stack Opening, (inches, diameter)   | NA    |
| Exhaust Temperature (°F)            | NA    |
| Exhaust Flowrate (scfm)             | NA    |

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**12. Compliance Demonstration(s)**

| Pollutant         | Compliance Demonstration | Compliance Methodology | Frequency     |
|-------------------|--------------------------|------------------------|---------------|
| PM – Federal      | No                       | NA                     | NA            |
| PM – State        | Yes                      | Silt Load Sampling     | Monthly Basis |
| PM <sub>10</sub>  | No                       | NA                     | NA            |
| PM <sub>2.5</sub> | No                       | NA                     | NA            |
| Opacity           | No                       | NA                     | NA            |
| SO <sub>2</sub>   | No                       | NA                     | NA            |
| NO <sub>x</sub>   | No                       | NA                     | NA            |
| VOC               | No                       | NA                     | NA            |
| CO                | No                       | NA                     | NA            |
| Pb                | No                       | NA                     | NA            |
| CO <sub>2</sub>   | No                       | NA                     | NA            |
| CH <sub>4</sub>   | No                       | NA                     | NA            |
| N <sub>2</sub> O  | No                       | NA                     | NA            |
| CO <sub>2</sub> e | No                       | NA                     | NA            |
| Single HAP        | No                       | NA                     | NA            |
| Total HAP         | No                       | NA                     | NA            |

**If an initial compliance demonstration specified above is testing**, the owner or the owner’s authorized agent shall verify compliance with the emission limitations contained in Permit Condition 10 within 90 days after issuance of this air construction permit unless otherwise specified.

**If subsequent testing is specified above**, the owner or the owner’s authorized agent shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency and timeframe noted above. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

**13. New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

The emission unit is not subject to any of the New Source Performance Standards (NSPS).

This project is not subject to any National Emission Standards for Hazardous Air Pollutants Area Source Standards.

Failure to include any NSPS or NESHAP requirements as a part of this permit does not relieve the permittee from the requirement to comply with all applicable NSPS or NESHAP requirements.

**14. Operating Limits**

Operating limits for this emission unit shall be:

- A. All haul roads at the facility shall be paved. The facility shall complete the paving of haul road segments 7, 14, 15, and 16 by October 31, 2015.
- B. The facility shall stop using haul road segment 17 by October 31, 2015.
- C. Fugitive dust emissions generated from truck traffic on the paved haul roads shall, at a minimum, be controlled by:
  - Sweeping, at a minimum, 3 times per week when the haul roads are used six (6) days in a week, with a maximum of one operating day (i.e., Sunday and holidays would not be considered operating days since there is no movement of material) between sweeping events except as noted in Conditions 14C (i) through (iii). All sweeping must be completed using a Tynco DST-6 Sweeper or functionally equivalent sweeper type (as approved by the Department).
  - i. Paved road sweeping shall begin within seven (7) days of the permit issuance date.

**14. Operating Limits (Continued)**

- ii. If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
  - iii. Paved road sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, paved road sweeping shall resume within 24-hours after the precipitation event has ended.
  - iv. Paved road sweeping need not occur when the facility experiences no haul road traffic on that calendar day (i.e., the facility would not count this day towards the maximum of one day between sweeping).
  - v. The facility may request reduced sampling frequency should 12 consecutive tests show compliance with the silt load limit. The facility shall submit the test results to the Department with the permit modification request to reduce sampling frequency.
- D. If sweeping cannot be accomplished for the entire month due to ambient temperatures or hazardous weather, silt load testing is not required for that month.
- E. The haul road surface silt loading shall not exceed 2.70 g/m<sup>2</sup>.
- F. Traffic on the haul roads shall not exceed 20 mph. The speed limit shall be posted on all haul roads.
- G. The facility is limited to shipping (inbound and outbound) material between the hours of 5am to 8 pm, Monday through Friday and 8 am to 12 pm on Saturday.
- H. The facility is limited to processing/shipping (inbound and outbound) no more than 946,000 tons of material per rolling 12-month period.
- I. Internal transfers at the facility are limited to Monday through Friday.
- J. Best Management Practices (BMP) – Clean up spills, truck scale areas, etc. Alter Metal shall implement “good housekeeping” or best management practices to minimize fugitive emissions. Such practices include but are not limited to:
- i. Clean up spills of raw materials or product on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing emissions.
  - ii. Clean on weekly basis, around truck scale areas and process buildings.
  - iii. Maintain and post speed limit signs.
- K. Limit public access. Starting on either July 31, 2014, or by no later than 30 days after the date of permit issuance, whichever comes later, Alter Metal shall restrict public access to the facility by posting signs warning of restricted access to the facility at all property boundary lines not secured with fencing. During those days the facility is operating, in-person surveillance of the boundary shared with the rail line shall be conducted by Alter Metal staff periodically throughout the day, including documentation as to surveillance times and locations. In lieu of in-person surveillance the facility may maintain and operate equipment adequate to ensure surveillance of the boundary shared with the rail line during plant operations.
- The restriction does not apply to Alter Metal employees, employees, owner or lessees of contiguous properties, federal, state or local officials, emergency and maintenance service personnel (both private and public section), who have a legitimate reason or need for accessing the rail spur.
- L. Contingency Measures
- i. After November 30, 2014, the facility shall increase the frequency of cleaning/sweeping of the haul roads to daily within seven (7) days after notification by the Department that a monitored exceedance of the lead NAAQS occurred. The facility shall submit sweeping data to the Department and continue daily cleaning/sweeping until notified by the Department that a different cleaning/sweeping frequency shall be used.
  - ii. If a monitored exceedance of the lead NAAQS occurs after the provisions of Permit Condition 14.L.i. have been implemented for three (3) full calendar months, Alter Metal will submit an emissions evaluation meeting the criteria and timeline specified by the Department.

**15. Operating Condition Monitoring and Recordkeeping**

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The facility shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
- B. The facility shall record daily the date and time of material processed at the facility (i.e., record inbound and outbound shipments of process material).
- C. The facility shall calculate on a monthly basis the amount of material processed/shipped (inbound and outbound) and calculate the rolling 12-month total amount of material processed (in tons).
- D. Performance testing on the haul road surface silt loading shall be completed on a monthly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations. The three sampled locations shall then be averaged to determine the silt loading average results. Performance testing shall be completed prior to paved road sweeping. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading.
- E. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
  - i. The date of silt load sampling event;
  - ii. The location of the sample taken;
  - iii. The measured silt content in grams;
  - iv. Sample area used for silt load sampling in meters; and,
  - v. The operator’s initials.
- F. Record the date paving of haul road segments 7, 14, 15, and 16 was completed.
- G. Record the date the closure of haul road segment 17 was finalized.
- H. The facility shall maintain records of BMP activities completed under Condition 14J.
- I. Record the date control measures restricting public access to the facility (posting signs, performing in-person surveillance and/or installing electronic surveillance, installing fences, etc.) is initiated. Record the date, with documentation, for all subsequent surveillance times and locations.

**16. Continuous Emission Monitoring**

This permit does not require continuous emission monitoring.

**17. Permit History**

| Permit No. | Proj. No. | Description | Date | Stack Testing |
|------------|-----------|-------------|------|---------------|
|            |           |             |      |               |
|            |           |             |      |               |

**18. Description of Terms and Acronyms**

*The descriptions below are meant only as a brief explanation of terms contained within the permit and may not be the exact definition of the term or acronym as contained within the regulations.*

|                   |                                                                                                                                                                                                                                                    |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| acfm              | Actual cubic feet per minute                                                                                                                                                                                                                       |
| Applicant         | The owner, company official or authorized agent                                                                                                                                                                                                    |
| Btu               | British thermal unit                                                                                                                                                                                                                               |
| °C                | Degrees Celsius                                                                                                                                                                                                                                    |
| Condensable PM    | Material that condenses and/or reacts upon cooling and dilution in the ambient air to form particulate matter immediately after discharge from the stack                                                                                           |
| CO <sub>2</sub> e | Carbon dioxide equivalent which is the aggregate emissions of greenhouse gas (GHG) emissions based on global warming potentials                                                                                                                    |
| Department        | Iowa Department of Natural Resources                                                                                                                                                                                                               |
| dia.              | Diameter                                                                                                                                                                                                                                           |
| °F                | Degrees Fahrenheit                                                                                                                                                                                                                                 |
| ft                | Foot                                                                                                                                                                                                                                               |
| GHG               | Greenhouse Gas which is defined as being the group of carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulfur hexafluoride (SF <sub>6</sub> ) |
| g                 | grams                                                                                                                                                                                                                                              |
| g/dscm            | Grams per dry standard cubic meter                                                                                                                                                                                                                 |
| gr                | Grains                                                                                                                                                                                                                                             |
| gr/dscf           | Grains per dry standard cubic foot                                                                                                                                                                                                                 |
| gr/scf            | Grains per standard cubic foot                                                                                                                                                                                                                     |
| HAP               | Hazardous Air Pollutant(s)                                                                                                                                                                                                                         |
| hp                | horsepower                                                                                                                                                                                                                                         |
| hr                | Hour                                                                                                                                                                                                                                               |
| lb                | Pound                                                                                                                                                                                                                                              |
| lb/hr             | Pounds per hour                                                                                                                                                                                                                                    |
| m                 | Meter                                                                                                                                                                                                                                              |
| mg                | Milligram                                                                                                                                                                                                                                          |
| MM                | Million                                                                                                                                                                                                                                            |
| MW                | Megawatt                                                                                                                                                                                                                                           |
| NA                | Not Applicable                                                                                                                                                                                                                                     |
| PM <sub>2.5</sub> | Particulate Matter with an aerodynamic diameter equal to or less than 2.5 microns                                                                                                                                                                  |
| PM <sub>10</sub>  | Particulate Matter with an aerodynamic diameter equal to or less than 10 microns                                                                                                                                                                   |
| PM – Federal      | Particulate Matter that does not include the condensable PM                                                                                                                                                                                        |
| PM – State        | Particulate Matter that includes condensable PM                                                                                                                                                                                                    |
| ppm               | parts per million                                                                                                                                                                                                                                  |
| ppm <sub>v</sub>  | parts per million by volume                                                                                                                                                                                                                        |
| ppm <sub>w</sub>  | parts per million by weight                                                                                                                                                                                                                        |
| RACT              | Reasonably Available Control Technology                                                                                                                                                                                                            |
| scfm              | Standard cubic feet per minute                                                                                                                                                                                                                     |
| SHAP              | Single hazardous air pollutant                                                                                                                                                                                                                     |
| THAP              | Total hazardous air pollutants                                                                                                                                                                                                                     |
| tons/yr           | Tons per year                                                                                                                                                                                                                                      |
| yr                | Year                                                                                                                                                                                                                                               |

**END OF PERMIT**

**Appendix D. Facility Changes at Alter Metal Recycling**

In 2013 Alter Metal Recycling began construction on a project to allow the facility to recover non-ferrous materials from shredder fluff previously landfilled or otherwise disposed as waste. This modification is referred to as the addition of the “ZC Plant.” According to documentation provided by Alter Metal Recycling, the emissions units at the ZC Plant are described as a collection of conveyors and nonferrous scrap metal recovery equipment located inside the ZC Plant building, and loading, classification, and feed equipment located outdoors.

Construction of the ZC Plant affects the lead nonattainment SIP because it adds, removes, and modifies the haul road locations, affects road segment and route lengths, and changes the traffic data. While not all road segments are affected by the addition of the ZC Plant the resultant road segment layouts and traffic patterns are distinctly different from the baseline. The attainment demonstration, control strategy, and construction permits issued to Alter Metal Recycling account for all roadway modifications associated with the ZC Plant addition.

The original (baseyear) haul road segment layout is depicted in Figure D-1 and the new haul road segment layout (used in the control strategy modeling) is depicted in Figure D-2. Road segments not affected (in terms of the physical properties such as location, length or width)<sup>20</sup> by the addition of the ZC Plant are depicted in Figure D-3. For historical reference, the original (baseyear) configuration of all the segments modified or removed with the addition of the ZC plant is shown in Figure D-4; their new configuration under the ZC Plant layout is displayed in Figure D-5. A description of the segment changes and updated segments lengths are provided in Table D-1.

Although the total length of all road segments associated with the ZC Plant (2,185 m; see Table D-1) is greater than the baseline (1,969 m; see Table A-7), total road segment length does not directly correlate to emissions. Changes in facility traffic characteristic, such as traffic patterns, traffic volumes, and resultant vehicle miles travelled are more important factors. Several high-traffic routes have been shortened due the addition of segment 18 (see Figure D-5 ) which is typically used in lieu of baseline segments 4, 5, and 6 (see Figure D-4).

While three new routes (Routes 5, 6, and 7)<sup>21</sup> have been added, this again doesn’t necessarily increase emissions. For example, a large amount of traffic on a short route can generate more emissions than a small amount of traffic over a longer path. Additionally, all roads must be paved or their use discontinued. Not only are the roadway types, traffic patterns, and resultant vehicles miles travelled important, the most significant consideration is the reduction in the amount of suspendable lead on the roadways. In summary, the measures required by the control strategy equate to a 95% reduction in baseline lead emissions from Alter Metal Recycling.

<sup>20</sup> VMT and traffic data for all road segments differ versus the baseline. Due to complexity the VMT and traffic data are not readily reproducible in a useable format in this document.

<sup>21</sup> For informational purposes, the seven routes used by Alter Metal Recycling are explained in terms of road segments in Table D-2. Routes 1 through 4 are similar to the baseline, however, use of segment 17(u) will be eliminated and all unpaved surfaces must be paved. Three new routes have been added to accommodate activities associated with the ZC Plant. The route paths are depicted in Figure D-6.

#### D-1. ZC Plant Lead Emissions

Negligible lead emissions increases are anticipated with the operation of the ZC Plant. Alter Metal Recycling calculated the potential lead emissions from the ZC Plant at 14 lbs/yr.<sup>22</sup> This value is less than 1% (0.97%) of the total baseline lead emissions. The control strategy is expected to reduce lead emission at Alter Metal Recycling by approximately 95%. Lead emissions from the ZC Plant are not expected to delay or interfere with the attainment of the lead NAAQS. An investigation of lead emissions from the ZC Plant may occur in the unlikely event that contingency measures are triggered.



Figure D-1. Depiction of all facility road segments as they existed in the 2010 baseline. (Google Earth's Imagery Date of 3/7/2012.) Unpaved routes are depicted with a "u" and segment 14(\*) was originally paved but treated as an unpaved road in the baseline due to surface deterioration.

<sup>22</sup> Provided by Alter Metal Recycling in the small unit exemption (SUE) documentation. The applicable SUE rules were those in 567 IAC 22.1(2) in effect prior to revisions published in the Iowa Administrative Bulletin on September 18, 2013.



Figure D-2. Depiction of facility road segments expected after completion of the ZC Plant. (Google Earth's Imagery Date of 9/21/2013.) The control strategy requires all segments be paved, or their use discontinued, by October 31, 2015.



Figure D-3. Road segments whose dimensions and locations are not affected by the addition of the ZC Plant (they are the same as in the baseyear). (Google Earth's Imagery Date of 9/21/2013.) (Note, segment 14(\*) is treated as an unpaved road in the baseline and as a paved road in the control strategy.)



Figure D-4. Baseline road segments whose lengths or locations are modified with the addition of the ZC Plant (this image is shown for historical/informational purposes).



Figure D-5. Depiction of the modified and new road segments associated with the ZC Plant. (Google Earth's Imagery Date of 9/21/2013.)

Table D-1. Road segments and lengths at Alter Metal Recycling in the control strategy/attainment demonstration (the ZC Plant configuration) and a description of changes in the road segments between the original (baseyear) layout and the ZC Plant layout.

| Segment ID | Length (m)   | Notes                                                                              |
|------------|--------------|------------------------------------------------------------------------------------|
| 1          | 100          | Same layout as baseline                                                            |
| 2          | 160          | Same layout as baseline                                                            |
| 3          | 61           | Same layout as baseline                                                            |
| 4'         | 203          | ZC segments 4 and 4' (combined) are 10 m shorter than baseline segment 4           |
| 4          | 135          | (because ZC segment 7' was shifted east about 10 m compared to baseline segment 7) |
| 5          | 22           | Same length as baseline, just shifted east 10 m compared to baseline segment 5     |
| 6          | 20           | Same length as baseline, just shifted east 10 m compared to baseline segment 6     |
| 7'         | 55           | Shifted east 10 m compared to baseline segment 7                                   |
| 8          | 143          | Extended east 10 m to correspond w/ shift of segment 7'                            |
| 9          | 32           | Same layout as baseline                                                            |
| 10         | 293          | Same layout as baseline                                                            |
| 11         | 88           | Same layout as baseline                                                            |
| 12         | 76           | Same layout as baseline                                                            |
| 13         | 92           | Same layout as baseline                                                            |
| 14         | 60           | Same layout as baseline                                                            |
| 15         | 138          | Extended east 10 m to correspond w/ shift of Segment 7'                            |
| 16         | 39           | Shifted east and shortened to align with the intersection of new segment 20' 22    |
| 17         | 28           | An extension of segment 16 to provide access to west end of ferrous yard*          |
| 18         | 134          | New paved segment associated w/ ZC plant                                           |
| 19         | 60           | New paved segment associated w/ ZC plant                                           |
| 21         | 115          | New paved segment associated w/ ZC plant                                           |
| 20' 22     | 131          | New paved segment associated w/ ZC plant                                           |
| <b>SUM</b> | <b>2,185</b> |                                                                                    |

\*Otherwise not associated with baseline segments 17(u) (which is scheduled for elimination)

Table D-2. Route paths and total lengths used in the control strategy for Alter Metal Recycling. Routes generally reflect a round trip path through the facility and are defined by the segments traversed.

| Route ID | Route Definition (By Segment ID)                | Total Route Length (m) |
|----------|-------------------------------------------------|------------------------|
| 1        | 1-3-4'-18-8-9-10-11-12-9-8-18-4'-3-1            | 1,891                  |
| 2        | 1-3-4'-18-8-9-12-13-14-8-18-4'-3-1              | 1,542                  |
| 3        | 1-2-4'-18-7'-16-17-17-16-7'-18-4'-2-1           | 1,438                  |
| 4        | 1-3-4'-18-8-14-15-16-17-17-16-15-14-8-18-4'-3-1 | 1,812                  |
| 5        | 13-14-8-7'-16-20' 22-21-8-9-12                  | 886                    |
| 6        | 1-2-4'-19-21-6-5-4-4'-2-1                       | 1,278                  |
| 7        | 1-2-4'-19-20' 22-16-7'-18-4'-2-1                | 1,345                  |

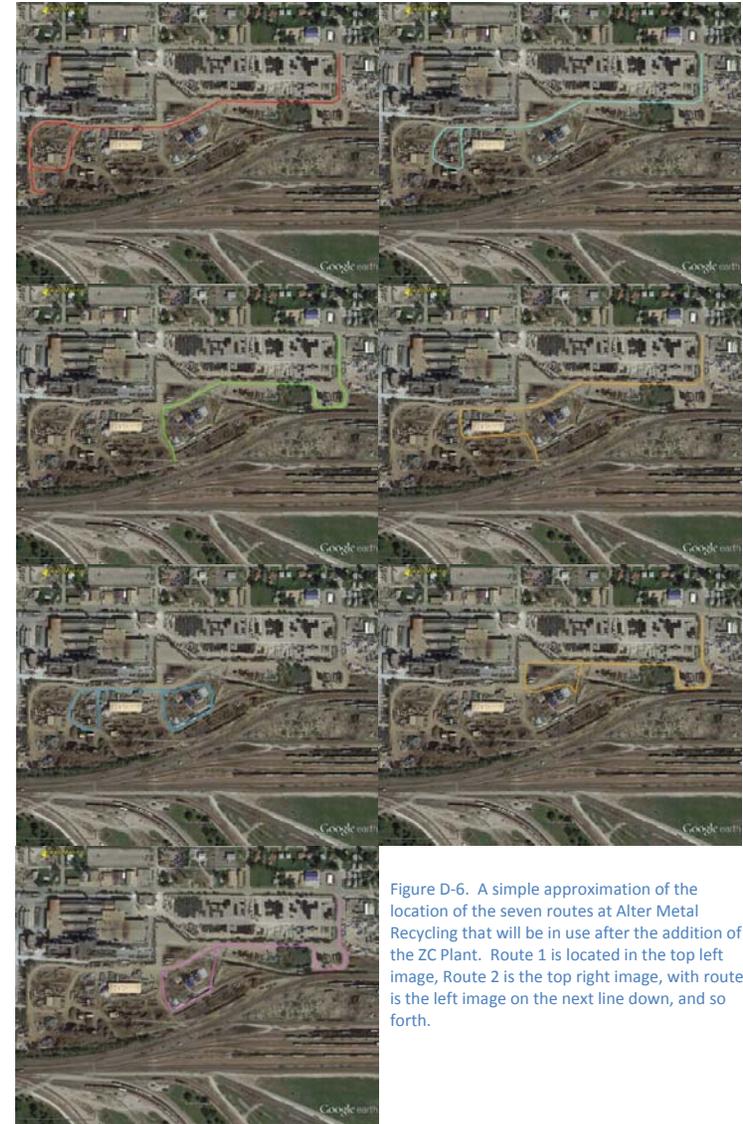


Figure D-6. A simple approximation of the location of the seven routes at Alter Metal Recycling that will be in use after the addition of the ZC Plant. Route 1 is located in the top left image, Route 2 is the top right image, with route 3 is the left image on the next line down, and so forth.

**Appendix E. Proof of Publication**

**E-1. Alter Metal Recycling Draft Construction Permit**

**PROOF OF PUBLICATION**

STATE OF IOWA  
POTTAWATTAMIE COUNTY

I, Amy McKay, on my oath do solemnly swear that I am the Controller of the COUNCIL BLUFFS DAILY NONPAREIL, a newspaper issued DAILY and printed in said county, COUNCIL BLUFFS, IOWA.

The attached notice was published in said newspaper for 1 consecutive time(s) as follows:

The first publication thereof began on the 20th day of July, 2014

Signed in my presence by the said Amy McKay and by her sworn to before me this 21st day of July, A.D. 2014.

Amy McKay  
Daily Nonpareil Controller

Jeannette Johnson  
Notary Public

RECEIVED  
JUL 23 2014  
IDNR AIR QUALITY

Filed this 21st day of July, A.D. 2014.  
Publication Cost: \$ 35.03

Customer Number: 50002790  
Order Number: 20365904

**Public Notice**  
Iowa Department of Natural Resources  
700 Webster Road, Suite 1  
Winona Heights, Iowa 50201  
To be posted to [www.dnr.iowa.gov](http://www.dnr.iowa.gov)  
Any materials related to comments submitted by the public shall be included in full and not be interpreted by reference unless the material is abstract part of the administrative record or consists of laws or Federal statutes and regulations, EPA documents of general applicability, or other available reference materials.  
Upon a final decision on the project, all comments, Department responses, and the final documents will be available for public inspection at the Department office listed above and on the Air Quality Resource website:  
<http://www.iowadnr.com/airquality/airquality.cfm>  
In addition, all comments, Department responses and the final documents will be available at EPA, the open VA, for thirty (30) days after the final decision.  
20140720 1 Tuesday

**Public Notice**  
Iowa Department of Natural Resources  
700 Webster Road, Suite 1  
Winona Heights, Iowa 50201  
To be posted to [www.dnr.iowa.gov](http://www.dnr.iowa.gov)  
Any materials related to comments submitted by the public shall be included in full and not be interpreted by reference unless the material is abstract part of the administrative record or consists of laws or Federal statutes and regulations, EPA documents of general applicability, or other available reference materials.  
Upon a final decision on the project, all comments, Department responses, and the final documents will be available for public inspection at the Department office listed above and on the Air Quality Resource website:  
<http://www.iowadnr.com/airquality/airquality.cfm>  
In addition, all comments, Department responses and the final documents will be available at EPA, the open VA, for thirty (30) days after the final decision.  
20140720 1 Tuesday

E-2. Proof of Publication of the SIP's Public Notice in *The Daily Nonpareil*.

**PROOF OF PUBLICATION**

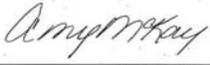
STATE OF IOWA  
POTTAWATTAMIE COUNTY

I, Amy McKay, on my oath do solemnly swear that I am the Controller of the COUNCIL BLUFFS DAILY NONPAREIL, a newspaper issued DAILY and printed in said county, COUNCIL BLUFFS, IOWA.

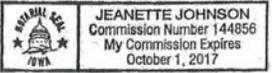
The attached notice was published in said newspaper for 1 consecutive time(s) as follows:

The first publication thereof began on the 20th day of November, 2014

Signed in my presence by the said Amy McKay and by her sworn to before me this 20th day of November, A.D. 2014.

  
\_\_\_\_\_  
Amy McKay  
Daily Nonpareil Controller

  
\_\_\_\_\_  
Jeannett Johnson  
Notary Public



Filed this 20th day of November, A.D. 2014.  
Publication Cost: \$ 33.90

Customer Number: 50002790  
Order Number: 20375096

**Public Notice**

**Iowa Department of Natural Resources**

The Iowa Department of Natural Resources (DNR) is requesting public comment on the State of Iowa's state implementation plan (SIP) for the lead nonattainment area in Council Bluffs, Iowa. In 2008 the U.S. Environmental Protection Agency (EPA) revised the national ambient air quality standards (NAAQS) for lead. Using data from the latest public health studies, EPA reduced the permissible lead levels allowed to be in by a factor of ten. A lead monitor in Council Bluffs measured lead levels that did not attain (meet) the revised lead NAAQS. On December 22, 2014, EPA designated a portion of Council Bluffs as a nonattainment area for lead. The federal Clean Air Act requires the state to develop a control strategy that will bring the area into attainment with the lead NAAQS. The DNR collaborated with all the lead-monitoring sources within the nonattainment area to develop air pollution control measures that will result in expeditious attainment of the lead NAAQS through reductions of ambient air impacts of lead emissions.

An electronic copy of the SIP document may be viewed at [www.dnr.iowa.gov](http://www.dnr.iowa.gov). First click on the IOWA DNR homepage. Then from the left side of the page select Regulatory Air followed by Substantive Enforcement. The SIP document will be under the Public Input section of the page in the area titled Council Bluffs Lead Implementation SIP. A copy of the document may also be viewed at the Council Bluffs Public Library, located at 405 Wilson Ave., Council Bluffs, Iowa, 51503.

Any person may make written comments on the proposed SIP revisions on or before December 22, 2014. Written comments should be directed to Matt Olson-Johnson, Department of Natural Resources, Air Quality Bureau, 2000 Michigan Road, Suite 1, Windsor Heights, Iowa, 52250, by fax at 562-725-9301, or by electronic mail to [matthew.johnson@dnr.iowa.gov](mailto:matthew.johnson@dnr.iowa.gov).

A public hearing will be held on December 22, 2014 at 10:30 am at the Council Bluffs Public Library, located at 405 Wilson Ave., Council Bluffs, Iowa, 51503. All comments must be received no later than 4:30 pm on December 22, 2014.

Any person who travels to attend the public hearing and has special requirements such as those related to hearing or mobility impairment should contact Matthew Johnson at 562-725-9301 or at the email address above to advise of any specific needs.

A responsiveness summary will be prepared by the DNR following the close of the public comment period. The responsiveness summary will include any written or oral comments received during the public participation process and the DNR's response to the comments. The completed responsiveness summary will be forwarded to EPA and made available to the public upon request.

20141120-1 Thursday

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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ITEM

7

**DECISION**

**TOPIC:** Solid Waste Environmental Management Systems' Grant Award  
Recommendations

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**Recommendations**

The Department received eleven (11) grant applications requesting \$355,609 in financial assistance during the November 1 2014, round of funding. The review committee selected eight (8) projects for funding totaling \$298,642. Six (6) applications recommended for funding are greater than \$25,000 each, awarding a total of \$266,916. Commission approval is required for DNR to write agreements for those applications.

The review committee is made up of the Solid Waste Alternatives Program Advisory (EMS) Council (Council); a nine-member committee established in House File 2570 and Iowa Code 455J. Members are appointed by the director representing: Department of Natural Resources, Iowa Society of Solid Waste Operations, Iowa Recycling Association, Iowa Chapter of the National Solid Waste Management Association, Iowa Waste Exchange, Iowa Department of Economic Development (now Iowa Economic Development Authority) Recycle Iowa program, and three members representing Solid Waste Planning Areas of various sizes.

**Contractor Selection Process**

Council members scored applications for their own purposes, based on Grant Criteria set by Council. At the December 5, 2014 Council Meeting, applications were discussed and a yes/no vote was taken on each application to determine whether or not each would be funded and at what funding level.

At this time, the Department is requesting Commission approval to enter into agreements with the selected applicants. A description of these recommended projects, the project type, and the amount and type of funding assistance is attached.

**Background and Funding Source**

The Environmental Management System Program is a voluntary program established by 2008 Legislation House File 2570 (Iowa Code 455J.7). As established in Code, grant funds are available only to Solid Waste Agencies and Permitted Facility Service Areas designated as Environmental Management Systems by the Environmental Protection Commission. Applications must be consistent with EMS goals and demonstrate a commitment to continuous improvement.

Jennifer Wright, Environmental Program Supervisor  
Land Quality Bureau  
Environmental Services Division

December 19, 2014

**SOLID WASTE ALTERNATIVES PROGRAM EMS  
PROPOSAL RECOMMENDATIONS**

The Department received eleven (11) grant request proposals for consideration during the November 1, 2014 round of funding. Eight (8) projects were selected for funding. Two of the projects were under \$25,000.

The following provides a description of the projects for which Commission approval is requested.

|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            |                 |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| <b>Great River Regional Waste Authority</b><br>2092 303 Ave<br>Fort Madison, IA 52627 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Award:</b>              | <b>\$39,049</b> |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Cash Match:</b>         | <b>\$13,017</b> |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Total Project Cost:</b> | <b>\$52,066</b> |
| <b>Project Title:</b>                                                                 | <b>Project: GRRWA EMS Projects</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                            |                 |
| <b>Contact:</b>                                                                       | Wade Hamm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Phone: (319) 372-6140      |                 |
| <b>Description:</b>                                                                   | <p>Through their funded project, Great River Regional Waste Authority will focus on the following component area(s): Environmental Education and GHG Reduction.</p> <ul style="list-style-type: none"> <li>• Develop and distribute 50,000 brochure/manuals that describe the services offered by GRRWA. The service manual will be provided to area residents and will describe GRRWA programs &amp; services, ways to protect the environment and the environmental benefits derived as a result of residents utilizing GRRWA.</li> <li>• Replace all lights at the Recycling Facility with energy efficient lighting-T5 Fluorescent lighting. This project will reduce the amount of energy used at their facility and ultimately reduce carbon emissions and save money on their utility bill.</li> <li>• Improve the building envelope of the Recycling Facility by insulating the building. This project will reduce the amount of heat lost , also reducing the amount of natural gas required to make the building comfortable and ultimately reduce carbon emissions and save money on their utility bill.</li> </ul> |                            |                 |
| <b>Target Area:</b>                                                                   | The City of Hillsboro and the unincorporated area in Henry County; all cities and the unincorporated area in Lee County; and all cities and the unincorporated area in Van Buren County                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |                 |

|                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            |                 |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| <b>Iowa City Landfill and Recycling Center</b><br>3900 Hebl Avenue SW<br>Iowa City IA 52246 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Award:</b>              | <b>\$46,875</b> |
|                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Cash Match:</b>         | <b>\$15,625</b> |
|                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Total Project Cost:</b> | <b>\$62,500</b> |
| <b>Project Title:</b>                                                                       | <b>Project: Landfill gas heat for facilities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                 |
| <b>Contact:</b>                                                                             | Brooke Butler                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Phone: (319) 356-5185      |                 |
| <b>Description:</b>                                                                         | <p>Through their funded project, the Iowa City Landfill and Recycling Center will focus on the following component area: GHG Reduction. They propose modifying the current heating system at the landfill by replacing it with landfill gas that is currently being flared at the landfill. The purpose is to essentially eliminate the use propane at the facility and to beneficially use a portion of the landfill gas generated on-site. This will reduce carbon dioxide emissions by over 60 tons /year &amp; eliminate the use of 10,000 gallons of propane/year. This project will reduce their carbon emissions and save money on their utility bills.</p> |                            |                 |
| <b>Target Area:</b>                                                                         | The Iowa City Landfill and Recycling Facility Service Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                 |

|                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                 |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| <b>Metro Waste Authority (MWA)</b><br><b>1105 Prairie Drive SW</b><br><b>Bondurant IA 50035</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Award:</b>              | <b>\$49,125</b> |
|                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Cash Match:</b>         | <b>\$16,375</b> |
|                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Total Project Cost:</b> | <b>\$65,500</b> |
| <b>Project Title:</b>                                                                           | <b>Project: Leachate Management at Metro Park West</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |                 |
| <b>Contact:</b>                                                                                 | Rhonda O'Connor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Phone: (515) 323-6524      |                 |
| <b>Description:</b>                                                                             | Through their funded project, Metro Waste Authority will focus on the following component area: GHG Reduction. Metro Waste Authority (MWA) will utilize a supplemental leachate management strategy involving the use of solar panels, piping, and a supervisory control and data acquisition (SCADA) system to pump leachate at the Metro Park West Landfill (MPW) directly from the lagoon to a designated area within the landfill for recirculation activities. The leachate is presently hauled by tanker truck to the working face. The new management strategy will help reduce greenhouse gas emissions by eliminating a leachate tanker truck (more than 200 round trips/ year), reduce consumption of coal produced electricity, reduce diesel fuel consumption, lower leachate management costs, and decrease the labor hour's necessary to manage leachate at the facility. |                            |                 |
| <b>Target Area:</b>                                                                             | The Metro Waste Authority Service Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |                 |

|                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |                 |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| Ottumwa/Wapello County Solid Waste Commission (Ottumwa/Wapello)<br>105 E. Third Street<br>Ottumwa, Iowa 52501 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Award:</b>              | <b>\$48,233</b> |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Cash Match:</b>         | <b>\$16,078</b> |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Total Project Cost:</b> | <b>\$64,311</b> |
| <b>Project Title:</b>                                                                                         | <b>Ottumwa/Wapello 2015 EMS Projects</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                 |
| <b>Contact:</b>                                                                                               | Jody Gates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (641) 683-0694             |                 |
| <b>Description:</b>                                                                                           | Through their funded project, Ottumwa/Wapello County Solid Waste Commission will focus on the following component area(s): Recycling Services, Water Quality Improvement, and GHG Reduction. Ottumwa/Wapello will: <ul style="list-style-type: none"> <li>• Purchase 500 additional recycling carts to continue to improve the participation in a voluntary curbside recycling program started in 2012. Recyclables are processed and tracked at Commission owned facilities. The more tons that are recycled results in less material being landfilled, savings in airspace and overall improvements to the environment.</li> <li>• Positively impact water quality in the landfill area by adding litter fencing to the existing fence already in place at/near the working face. This will prevent it from blowing to other parts of the landfill. This addition will help control windblown litter – improving water quality in the landfill area. Staff hours utilized on litter control and other measures will be used to determine the effectiveness of the fencing.</li> <li>• Install energy efficient LED lighting in the Recycling Center Warehouse, the Recycling Center Tipping Floor, and the Landfill Shop. This project will reduce the amount of energy used at their facility and ultimately reduce carbon emissions and save money on their utility bill.</li> </ul> |                            |                 |
| <b>Target Area:</b>                                                                                           | The all cities (except Eddyville) and unincorporated area in Wapello County and all cities and the unincorporated area in Davis County                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                 |

|                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>Waste Commission of Scott County<br/>(Commission)<br/>PO Box 563<br/>Buffalo, Iowa 52728</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |
|                                                                                                 | <b>Award:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>\$50,000</b>       |
|                                                                                                 | <b>Cash Match:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>\$40,000</b>       |
|                                                                                                 | <b>Total Project Cost:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>\$90,000</b>       |
| <b>Project Title:</b>                                                                           | <b>E-Waste and Wood Recycling Improvement Projects</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |
| <b>Contact:</b>                                                                                 | Kathy Morris                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Phone: (319) 381-1300 |
| <b>Description:</b>                                                                             | <p>Through their funded project, Waste Commission of Scott County will focus on the following component area(s): Household Hazardous Waste Collection and Recycling Services. The Commission will:</p> <ul style="list-style-type: none"> <li>• Purchase a box truck with a lift gate that will allow for efficient, safe collection service for businesses in the Commission’s service area. The truck will allow them to increase the number of customers they serve and the amount of electronics, universal waste and CESQG Waste collected that will be managed/ and or recycled at their Area Household Hazardous Material Facility and Electronic Demanufacturing Facility.</li> <li>• Expand the wood recycling pad at the landfill to allow for better management of wood waste that arrives at the landfill. Recycling of wood waste allows for maximization of landfill capacity and allows the Commission to provide better customer service and beneficially manage the materials rather than bury them in the landfill.</li> </ul> |                       |
| <b>Target Area:</b>                                                                             | Scott County, Muscatine, Dubuque, Jackson, Cedar, Fort Madison and Rock Island in Illinois                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |

|                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>West Central Iowa Solid Waste Management Assoc. (West Central)<br/>19111 Kitty Hawk Avenue<br/>Carroll, IA 51401</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |
|                                                                                                                         | <b>Award:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>\$33,364</b>       |
|                                                                                                                         | <b>Cash Match:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>\$33,364</b>       |
|                                                                                                                         | <b>Total Project Cost:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>\$67,268</b>       |
| <b>Project Title:</b>                                                                                                   | <b>WCISWMA EMS Projects</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |
| <b>Contact:</b>                                                                                                         | Mary Wittry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Phone: (712) 792-5001 |
| <b>Description:</b>                                                                                                     | <p>Through their funded project, West Central Iowa Solid Waste Management Association will focus on the following component area(s): Water Quality Improvement and Environmental Education. West Central will:</p> <ul style="list-style-type: none"> <li>• Improve site conditions by enhancing litter control. Grant funds will be used to purchase additional litter fencing for the landfill – 1,000 linear feet of containment netting that will be 35 feet high. This addition will help control windblown litter –improving water quality in the landfill area. Staff hours utilized on litter control and other measures will be used to determine the effectiveness of the fencing.</li> <li>• Educate and inform the public about proper yard waste disposal by designing and printing 27,000 flyers to help disseminate information about yard waste management in their community. There will also be composting tips.</li> </ul> |                       |
| <b>Target Area:</b>                                                                                                     | All cities and the unincorporated area in Carroll County; the Cities of Jolley, Lake City, Rinard, and Yetter, and the unincorporated area in Calhoun County; all cities and the unincorporated area in Crawford County; all cities and the unincorporated area in Shelby County; all cities and the unincorporated areas of Guthrie County, excluding the cities of Casey, Menlo, and Stuart; the Cities of Avoca and Minden and 170 specific waste generating sources located in the rural area adjacent to the City of Avoca in Pottawattamie County and the City of Adair in Adair County. The Cities of Exira and Brayton in Audubon County. The City of Fonda in Pocahontas County.                                                                                                                                                                                                                                                     |                       |

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**8**

**DECISION**

**TOPIC**

**Notice of Intended Action, Chapter 64, “Wastewater Construction and Operation Permits” and Storm Water General Permit No. 2 for Construction Activities – Topsoil Preservation**

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The Commission is asked to approve the attached Notice of Intended Action for Chapter 567-64 IAC “Wastewater Construction and Operation Permits” and changes to storm water General Permit No. 2. The proposed changes to Chapter 64 amend General Permit No. 2. The changes to General Permit No. 2 implement the recommendations of an Executive Order 80 stakeholders’ group regarding topsoil preservation.

The current requirement is that if 4 inches or more of topsoil existed prior to development, a minimum of 4 inches is to be in place on the surface of the site after construction is complete unless land use precludes the practice. The proposed requirement is that the permittee(s) shall, unless infeasible, preserve topsoil. “Infeasible” shall mean not technologically possible, or not economically practicable and achievable in light of the best industry practices as determined by the permittee. “Unless infeasible, preserve topsoil” shall mean that, unless infeasible, topsoil from any areas of the site where the surface of the ground for the permitted construction activities is disturbed, shall remain within the area covered by the applicable General Permit No. 2. Soil may be used elsewhere in the development and no minimum retention requirement is applicable to an individual lot or portion of the project.

A public comment period will begin after publication in the Iowa Administrative Bulletin. The Department intends to conduct public hearings in Des Moines, Cedar Rapids and Davenport to solicit public comments.

Joe Griffin, Environmental Specialist Senior  
NPDES Section, Water Quality Bureau  
Iowa Department of Natural Resources

December 29, 2014

## **ENVIRONMENTAL PROTECTION COMMISSION[567]**

### **Notice of Intended Action**

Pursuant to the authority of Iowa Code sections 455B.103A and 455B.105(3), the Environmental Protection Commission (Commission) hereby gives Notice of Intended Action to amend Chapter 64, “Wastewater Construction and Operation Permits,” Iowa Administrative Code.

The proposed amendments to Chapter 64 will revise General Permit No. 2 which authorizes the discharge of stormwater from construction sites. Substantive changes in General Permit No. 2 are required to implement the federal effluent guidelines for Construction and Development Point Sources. This standard is found at 40 CFR 450.21. Most of the measures in the federal effluent guidelines are already included in General Permit No. 2. The changes being proposed in General Permit No. 2 involve topsoil preservation at construction sites. The Code of Federal Regulations requires one to minimize soil compaction and, unless infeasible, preserve topsoil. Currently, the Commission defines this requirement as the preservation of at least 4 inches of topsoil at construction sites when this is consistent with land use practices and if at least 4 inches of topsoil existed on the site prior to construction.

At the time the 4-inch rule was adopted, it was generally believed by the Commission and stakeholders that the fiscal impact of the rule would be minimal and would not significantly impact developers, builders, or home buyers. In early 2014, various members of the development community requested that the language be changed to mirror the federal standard of preserving topsoil, unless feasible. These stakeholders reported that actual costs of implementation of the 4-inch standard were significantly

higher than anticipated, including costs with having to verify that the standard was uniformly met throughout the construction site. Cost impact estimates have been reported to vary from several hundred dollars per lot to several thousand dollars per lot. This economic concern led to the formation of an Executive Order (EO) 80 stakeholders' group, which convened meetings and obtained public input in 2014. The EO 80 stakeholders' group recommended to the Commission that the topsoil preservation requirement in General Permit No. 2 be changed to more closely align with the federal language, with some additional verbiage added. The EO 80 stakeholders' group indicated that the proposed revisions will result in a net reduction in costs to residential developers and home builders which would lead to lower prices for home purchasers. On September 16, 2014, the Commission directed the Department of Natural Resources (Department) to initiate rule making to adopt the EO 80 stakeholders' group recommendation for General Permit No. 2 with further, minor changes recommended by the Commission.

The following revisions to General Permit No. 2 are proposed:

Part IV.D.2.A.(2).(c) of the stormwater General Permit No. 2 is revised as follows:

**A.(2).(c).** Unless infeasible, the following measures shall be implemented at all sites: utilize outlet structures that withdraw water from the surface when discharging from basins, provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration ~~and minimize soil compaction. Topsoil shall be preserved at all construction sites unless land use precludes the practice. The requirement to preserve topsoil shall be met only when the depth of topsoil after soil disturbing~~

~~activities have been completed and final stabilization achieved for the permitted activity is equal to, or greater than, 4.0 inches, including soil contained in sod, on all areas of the site where the surface of the ground disturbed for the permitted construction activities is exposed and not covered by concrete, asphalt, gravel or other such material and where 4.0 inches or more of topsoil existed prior to the commencement of soil disturbing activities that are permitted under the current permit authorization for the site. On areas where less than 4.0 inches of topsoil existed prior to the commencement of soil disturbing activities that are permitted under the current permit authorization for the site, the minimum depth of topsoil after soil disturbing activities have been completed and final stabilization achieved for the permitted activity shall be equal to, or greater than, the depth of topsoil that existed prior to the commencement of soil disturbing activities that are permitted under the current permit authorization for the site. The final topsoil depth is to be measured after the soil has been compacted in a fashion generally considered adequate for an established lawn and so that the expected settling that will occur after measurement will be minimal and shall include the soil contained in any sod that has been placed on the site. The type of topsoil at the site after soil disturbing activities have been completed and final stabilization achieved for the permitted activity shall be similar to that which exists or existed in the general area of the site. The permittee(s) shall minimize soil compaction and, unless infeasible, preserve topsoil. "Infeasible" shall mean not technologically possible, or not economically practicable and achievable in light of the best industry practices. "Unless infeasible,~~

preserve topsoil” shall mean that, unless infeasible, topsoil from any areas of the site where the surface of the ground for the permitted construction activities is disturbed, shall remain within the area covered by the applicable General Permit No. 2. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed. The permittee(s) shall control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges and shall control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points. An affidavit signed by the permittee(s) may be submitted to demonstrate compliance.

For construction activity which is part of a larger common plan of development, such as a housing or commercial development project, in which a new owner agrees in writing to be solely responsible for compliance with the provisions of this permit for the property which has been transferred or in which the new owner has obtained authorization under this permit for a lot or lots (as specified in subrule 567--64.6(6) of the Iowa Administrative Code), the topsoil preservation requirements described above must be met no later than at the time the lot or lots have reached final stabilization as described in this permit.

~~For sites where less than 4.0 inches of topsoil is to be in place after soil disturbing activities have been completed and final stabilization achieved for the permitted activity, a soil survey conducted by properly~~

~~qualified personnel who regularly conduct soil surveys as part of their normal job duties must be conducted prior to commencement of soil disturbing activities that are permitted under the current permit authorization for the site. The results of the soil survey shall become part of the Pollution Prevention Plan and shall indicate the depth of topsoil at a suitable number of points on the site commensurate with standard engineering practices established for the size of the site.~~

The topsoil preservation requirement described above shall be implemented for projects that have not received an authorization under this permit prior to October 1, 2012. The topsoil preservation requirements are not required to be implemented for projects that have been authorized prior to October 1, 2012. In residential and commercial developments, a plat is considered a project. For other large areas that have been authorized for multiple construction sites, including those to be started at a future date, such as those located at industrial facilities, military installations and universities, a new construction project not yet surveyed and platted out is considered a project. This stipulation is intended to be interpreted as requiring the topsoil preservation requirements on development plats and construction activities on other extended areas that may have several construction projects permitted under the same authorization to be implemented on those projects not yet surveyed and platted out prior to October 1, 2012 even if other plats and construction activities in the same development or other extended area were authorized prior to October 1, 2012.

It is not the intent of the Commission that the textual changes in General Permit No. 2 be adopted in the Iowa Administrative Code but that these changes be made in the general permit itself which is adopted by reference into the Iowa Administrative Code.

Copies of the proposed revised General Permit No. 2 are available upon request from the Department at the address or telephone number below.

The proposed rule change will have minimal or no effect on jobs and employment opportunities. The substantive change regarding topsoil retention can be achieved with minimal disruption in the current sequence of events that occur during development and construction. A copy of the Jobs Impact Statement is available upon request.

Any interested party may make written comments on the proposed amendments on or before April 1, 2015. Written comments should be directed to the Storm Water Coordinator, Iowa Department of Natural Resources, 502 E. 9<sup>th</sup> Street, Des Moines, Iowa 50319; fax (515) 725-8202. People who wish to convey their views orally should contact the Storm Water Coordinator at (515) 725-8417 or at the Department's offices on the fifth floor of the Wallace State Office Building.

Public hearings will be held as follows:

March 18, 2015, 6:00 p.m., City Services Center, Five Seasons Conference Room, 500 15<sup>th</sup> Ave. SW, Cedar Rapids

March 25, 2015, 6:00 p.m., Eastern Ave. Branch Library, Room A, 6000 Eastern Ave., Davenport

March 27, 2015, 1:00 p.m., Wallace Building Auditorium, Ground Floor, 502 E. 9<sup>th</sup> St., Des Moines

This amendment is intended to implement Iowa Code chapter 455B, division I.

The following amendment is proposed.

Amend subrule 64.15(2) as follows:

**64.15(2)** Storm Water Discharge Associated with Industrial Activity for Construction Activities, NPDES General Permit No. 2, effective October 1, 2012 to October 1, 2017, as amended on ~~March 26, 2014~~ July 15, 2015.

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Date

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Chuck Gipp, Director

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**9**

Decision

**TOPIC**

**Notice of Intended Action – Chapter 61 – Water Quality Standards (Stream  
Reclassifications via Use Assessment and Use Attainability Analyses –  
Batch #4)**

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The commission will be asked to approve a Notice of Intended Action regarding proposed rulemaking to amend the recreational and warm water aquatic life use designations for approximately 83 river and stream segments. The individual Use Assessment and Use Attainability Analysis (UA/UAA) for these segments listed in the NOIA are available on the DNR's web site at:

<http://programs.iowadnr.gov/uaa/search.aspx>

Rulemaking combined with legislative action in 2006 established 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 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". An integral part of implementing the state's water quality rules is determining whether a stream is capable of supporting the presumed uses.

The concept of 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.

Alex Moon, Chief  
Water Quality Bureau  
Environmental Services Division

January 9, 2015

## **ENVIRONMENTAL PROTECTION COMMISSION [567]**

### **Notice of Intended Action**

Pursuant to the authority of Iowa Code sections 455B.105 and 455B.173, the Environmental Protection Commission (EPC) hereby gives Notice of Intended Action to amend Chapter 61, “Water Quality Standards,” Iowa Administrative Code.

This proposed rule revises rule 61.3(5) to adopt by reference a revised Surface Water Classification document. The revised and updated Surface Water Classification reflects use designations which have been determined through field work and the completion of a use attainability analysis (UAA). The primary revisions are to change from a presumed use of primary contact recreation to a determined use of secondary contact recreation.

The proposed rule will:

1. Revise and list approximately seven (7) stream segments as Class A1 Primary Contact Recreational Use designated waters in the rule-referenced document “Surface Water Classification.”
2. Revise and list approximately one (1) stream segment as Class A1 Primary Contact Recreational Use and Class B(WW-1) Warm Water – Type 1 Aquatic Life Use designated waters in the rule-referenced document “Surface Water Classification.”
3. Revise and list approximately eight (8) stream segments as Class A1 Primary Contact Recreational Use and Class B(WW-2) Warm Water – Type 2 Aquatic Life Use designated waters in the rule-referenced document “Surface Water Classification.”
4. Revise and list approximately three (3) stream segments as Class A2 Secondary Contact Recreational Use designated waters in the rule-referenced document “Surface Water Classification.”

5. Revise and list approximately thirty-seven (37) stream segments as Class A2 Secondary Contact Recreational Use and Class B(WW-2) Warm Water - Type 2 Aquatic Life Use designated waters in the rule-referenced document “Surface Water Classification.”

6. Revise and list approximately four (4) stream segments as Class A2 Secondary Contact Recreational Use and Class B(WW-3) Warm Water – Type 3 Aquatic Life Use designated waters in the rule-referenced document “Surface Water Classification.”

7. Revise and list approximately five (5) stream segments as Class A3 Children’s Recreational Use designated waters in the rule-referenced document “Surface Water Classification.”

8. Revise and list approximately sixteen (16) stream segments as Class A3 Children’s Recreational Use and Class B(WW-2) Warm Water – Type 2 designated waters in the rule-referenced document “Surface Water Classification.”

9. Revise and list approximately two (2) streams to match the United States Geological Survey (USGS) title in the rule-referenced document “Surface Water Classification.”

10. Revise and list approximately two (2) streams that were previously approved in EPC rulemaking efforts, but which were omitted from the rule-referenced document “Surface Water Classification.”

11. Revise the legal descriptions of approximately fifty-one (51) stream segments. These are not individually listed as designation changes, but changes are shown in the rule-referenced document “Surface Water Classification.”

The Clean Water Act establishes a rebuttable presumption that all Iowa streams can achieve the highest level of use, referred to as fishable and swimmable uses. In 2006, the EPC adopted this presumption by rule for all of Iowa’s previously undesignated perennial streams.

As an outcome of these efforts, all 26,000 miles of Iowa's perennial (flowing year-round) streams are initially designated at the highest levels for recreation (A1) and warm water aquatic life uses (B(WW-1)). These actions provide initial protection for many miles of perennial streams that were previously not designated for aquatic life or recreational uses.

The 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. This is called a UAA, which requires the gathering of site-specific field data on stream features and uses. The concept of UAA is being applied by the Department of Natural Resources (Department) as a step-by-step process to gather site-specific field data on stream features and uses. The Department assesses available information to determine if the "presumed" recreational and aquatic life uses are appropriate.

Iowa law (455B.176A) prohibits the Department from renewing a National Pollutant Discharge Elimination System (NPDES) permit for a facility discharging to a stream subject to the presumed protected uses of A1 and B(WW-1) until the Department conducts a UAA and redesignates the stream, if appropriate. Prior to issuing an NPDES permit for an affected facility, the Department must complete a UAA for the receiving stream or stream network. Below is a list of the proposed stream segment changes completed as a result of either field assessments conducted from 2005 to 2012 or from administrative changes. (Duplicate listings represent separate segments along the overall reach of the stream. For Chihaks Creek, the double listing represents two distinct changes to the stream, one of which is an administrative name change only.) Specific locations of these stream segments can be found in the draft "Surface Water

Classification” document and by using the ~~visual mapping aid that utilizes Google Earth GIS coverage~~ at the following webpage:

<http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterQualityStandards/DesignatedUses/UseAssessments.aspx>

In addition, each stream in this notice can be viewed in detail on the UAA Database at the following link:

<https://programs.iowadnr.gov/uaa/search.aspx>

The proposed stream segment revisions are detailed below:

### 1. Class A1 Stream Segments

|               | <b>Stream Name</b>                                                 | <b>UAA ID</b> | <b>Basin</b>          | <b>Class A1 Stream Segment Length (miles)</b> | <b>Aquatic Stream Segment Length (miles)</b> |
|---------------|--------------------------------------------------------------------|---------------|-----------------------|-----------------------------------------------|----------------------------------------------|
| 1             | Blue Creek (Benton/Linn Counties)                                  | 508           | Iowa-Cedar            | 5.50                                          | NA                                           |
| 2             | Camp Creek (Calhoun County)                                        | 1416          | Des Moines            | 8.3                                           | NA                                           |
| 3             | Dye Creek (Story County)                                           | 1461          | Skunk                 | 1.0                                           | NA                                           |
| 4             | East Indian Creek (Story County)                                   | 1460          | Skunk                 | 8.2                                           | NA                                           |
| <del>5</del>  | <del>Price Creek (Iowa County)</del>                               | <del>NA</del> | <del>Iowa-Cedar</del> | <del>0.3</del>                                | <del>NA</del>                                |
| <del>65</del> | South English River (Poweshiek/Mahaska/Keokuk/Washington Counties) | 1453          | Iowa-Cedar            | 10.6                                          | NA                                           |
| <del>76</del> | West Fork Camp Creek (Calhoun County)                              | 1415          | Des Moines            | 7.0                                           | NA                                           |
| <del>87</del> | White Fox Creek (Wright/Hamilton Counties)                         | 1466          | Des Moines            | 12.1                                          | NA                                           |

### 2. Class A1, B(WW-1) Stream Segments

|   | <b>Stream Name</b>         | <b>UAA ID</b> | <b>Basin</b> | <b>Class A1 Stream Segment Length (miles)</b> | <b>B(WW-1) Aquatic Stream Segment Length (miles)</b> |
|---|----------------------------|---------------|--------------|-----------------------------------------------|------------------------------------------------------|
| 1 | Saylor Creek (Polk County) | 1466          | Des Moines   | <0.1                                          | <0.1                                                 |

3. Class A1, B(WW-2) Stream Segments

|   | <b>Stream Name</b>                                                | <b>UAA ID</b> | <b>Basin</b> | <b>Class A1 Stream Segment Length (miles)</b> | <b>B(WW-2) Aquatic Stream Segment Length (miles)</b> |
|---|-------------------------------------------------------------------|---------------|--------------|-----------------------------------------------|------------------------------------------------------|
| 1 | Cub Creek (Poweshiek County)                                      | 1427          | Iowa-Cedar   | <0.1                                          | <0.1                                                 |
| 2 | Drainage Ditch 29 (Fonda, City of STP) (Pocahontas County)        | 1419          | Des Moines   | 0.5                                           | 0.5                                                  |
| 3 | Dry Run (O'Brien County)                                          | 1473          | Western      | 8.8                                           | 8.8                                                  |
| 4 | East Branch Blue Creek (Linn County)                              | 1499          | Iowa-Cedar   | 4.0                                           | 4.0                                                  |
| 5 | Fox Creek (Dallas County)                                         | 1457          | Des Moines   | 2.4                                           | 2.4                                                  |
| 6 | Unnamed Creek (Firestone Agricultural Tire Company) (Polk County) | 1485          | Des Moines   | 0.9                                           | 0.9                                                  |
| 7 | Unnamed Creek (Lanesboro, City of STP) (Carroll County)           | 1413          | Des Moines   | 0.1                                           | 0.1                                                  |
| 8 | Unnamed Creek (Pella Corp.) (Marion County)                       | 1422          | Des Moines   | <0.1                                          | <0.1                                                 |

4. Class A2 Stream Segments

|              | <b>Stream Name</b>                   | <b>UAA ID</b> | <b>Basin</b>          | <b>Class A2 Stream Segment Length (miles)</b> | <b>Aquatic Stream Segment Length (miles)</b> |
|--------------|--------------------------------------|---------------|-----------------------|-----------------------------------------------|----------------------------------------------|
| 1            | Chihaks Creek (Howard County)        | NA            | Northeastern          | 1.06                                          | NA                                           |
| 2            | Deep River (Poweshiek/Iowa Counties) | 1429          | Iowa-Cedar            | 7.5                                           | NA                                           |
| <del>3</del> | <del>Price Creek (Iowa County)</del> | <del>NA</del> | <del>Iowa-Cedar</del> | <del>0.3</del>                                | <del>NA</del>                                |

5. Class A2, B(WW-2) Stream Segments

|               | <b>Stream Name</b>                                         | <b>UAA ID</b>   | <b>Basin</b>          | <b>Class A2 Stream Segment Length (miles)</b> | <b>B(WW-2) Aquatic Stream Segment Length (miles)</b> |
|---------------|------------------------------------------------------------|-----------------|-----------------------|-----------------------------------------------|------------------------------------------------------|
| <del>4</del>  | <del>Brushy Creek (Carroll/Audubon/Guthrie Counties)</del> | <del>1359</del> | <del>Des Moines</del> | <del>6.07</del>                               | <del>3.82</del>                                      |
| <del>21</del> | Brushy Creek (Carroll/Audubon/Guthrie Counties)            | 1071            | Des Moines            | 4.04                                          | 4.04                                                 |
| <del>23</del> | Cub Creek (Poweshiek County)                               | 1426            | Iowa-Cedar            | 3.3                                           | 3.3                                                  |
| <del>34</del> | Drainage Ditch (Adair, City of STP) (Adair County)         | 1495            | Des Moines            | 0.2                                           | 0.2                                                  |
| <del>45</del> | Drainage Ditch 2 (I35-105 Interchange)                     | 1409            | Iowa-Cedar            | 9.4                                           | 9.4                                                  |

|                 |                                                                                    |      |              |      |      |
|-----------------|------------------------------------------------------------------------------------|------|--------------|------|------|
|                 | Commercial District) (Worth Co.)                                                   |      |              |      |      |
| <del>56</del>   | East Branch Blue Creek (Linn County)                                               | 1500 | Iowa-Cedar   | 4.2  | 4.2  |
| <del>67</del>   | Granger Creek (Dubuque County)                                                     | 1476 | Northeastern | 0.5  | 0.5  |
| <del>78</del>   | Little Creek (Iowa/Keokuk Counties)                                                | 1455 | Iowa-Cedar   | 6.1  | 6.1  |
| <del>89</del>   | Middle English River (Iowa County)                                                 | 1452 | Iowa-Cedar   | 10.2 | 2.8  |
| <del>940</del>  | Painter Creek (Madison/Warren Counties)                                            | 1420 | Des Moines   | 7.9  | 7.9  |
| <del>1044</del> | Soap Creek (Lee County)                                                            | 949  | Skunk        | 0.94 | 0.94 |
| <del>1142</del> | South English River<br>(Poweshiek/Mahaska/Keokuk/Washington<br>Counties)           | 1454 | Iowa-Cedar   | 21.8 | 6.1  |
| <del>1243</del> | Spring Creek (Des Moines County)                                                   | NA   | Iowa-Cedar   | 3.76 | 3.76 |
| <del>1344</del> | Unnamed Creek (Country Living Court,<br>LLC) (Story County)                        | 1462 | Skunk        | 0.2  | 0.2  |
| <del>1445</del> | Unnamed Creek (Deep River, City of<br>WWTP) (Poweshiek County)                     | 1428 | Iowa-Cedar   | 1.5  | 1.5  |
| <del>1546</del> | Unnamed Creek (Earling, City of STP)<br>(Shelby County)                            | 1498 | Western      | <0.1 | <0.1 |
| <del>1647</del> | Unnamed Creek (East Iowa Bible Camp)<br>(Iowa County)                              | 1450 | Iowa-Cedar   | 2.9  | 2.9  |
| <del>1748</del> | Unnamed Creek (Fonda, City of WWTP)<br>(Pocahontas County)                         | 1417 | Des Moines   | 0.2  | 0.2  |
| <del>1849</del> | Unnamed Creek (Kwik Star #303)                                                     | 1425 | Iowa-Cedar   | 1.9  | 1.9  |
| <del>1920</del> | Unnamed Creek (Lanesboro, City of STP)<br>(Carroll County)                         | 1414 | Des Moines   | 1.2  | 1.2  |
| <del>2024</del> | Unnamed Creek (Pella Corp.) (Marion<br>County)                                     | 1421 | Des Moines   | 0.5  | 0.5  |
| <del>2122</del> | Unnamed Creek (Primghar, City of STP)<br>(O'Brien County)                          | 1472 | Western      | <0.1 | <0.1 |
| <del>2223</del> | Unnamed Creek (Webster City, City of<br>WWTP)                                      | 1501 | Des Moines   | <0.1 | <0.1 |
| <del>2324</del> | Unnamed Creek (Wendling Quarries –<br>Robins Facility) (Linn County)               | 1479 | Iowa-Cedar   | 0.3  | 0.3  |
| <del>2425</del> | Unnamed Creek #1 (Des Moines<br>International Airport Outfall #2) (Polk<br>County) | 1490 | Des Moines   | 0.8  | 0.8  |
| <del>2526</del> | Unnamed Creek #1 (New Albin, City of<br>STP) (Allamakee County)                    | 979  | Northeastern | 0.47 | 0.47 |
| <del>2627</del> | Unnamed Creek #2 (Adair, City of STP)<br>(Guthrie County)                          | 1496 | Des Moines   | 1.4  | 1.4  |
| <del>2728</del> | Unnamed Creek #2 (Atkins, City of WTF)<br>(Benton County)                          | 1502 | Iowa-Cedar   | 1.2  | 1.2  |
| <del>2829</del> | Unnamed Creek #2 (Des Moines<br>International Airport Outfall #2) (Polk<br>County) | 1491 | Des Moines   | 0.2  | 0.2  |
| <del>2930</del> | Unnamed Creek #2 (John Deere Engine<br>Works) (Black Hawk County)                  | 1481 | Iowa-Cedar   | <0.1 | <0.1 |
| <del>3034</del> | Unnamed Creek #2 (Neal Smith National<br>Wildlife Refuge) (Jasper County)          | 1516 | Des Moines   | 2.0  | 2.0  |
| <del>3132</del> | Unnamed Creek #3 (Adair, City of STP)<br>(Adair/Guthrie Counties)                  | 1497 | Des Moines   | 1.9  | 1.9  |

|             |                                                                           |      |            |      |      |
|-------------|---------------------------------------------------------------------------|------|------------|------|------|
| <u>3233</u> | Unnamed Creek #3 (Macksburg, City of STP) (Madison County)                | 1489 | Southern   | 0.3  | 0.3  |
| <u>3334</u> | Unnamed Creek #4 (Des Moines International Airport Outfall #2) (Polk Co.) | 1493 | Des Moines | <0.1 | <0.1 |
| <u>3435</u> | West Fork Big Creek (Ringgold County)                                     | 1471 | Southern   | 10.2 | 10.2 |
| <u>3536</u> | West Jackson Creek (Wayne County)                                         | 1487 | Southern   | 2.5  | 2.5  |
| <u>3637</u> | White Fox Creek (Wright/Hamilton Counties)                                | 1467 | Des Moines | 15.8 | 15.8 |

#### 6. Class A2, B(WW-3) Stream Segments

|   | <b>Stream Name</b>                                                 | <b>UAA ID</b> | <b>Basin</b> | <b>Class A2 Stream Segment Length (miles)</b> | <b>B(WW-3) Aquatic Stream Segment Length (miles)</b> |
|---|--------------------------------------------------------------------|---------------|--------------|-----------------------------------------------|------------------------------------------------------|
| 1 | Rock Creek (Jefferson/Wapello Counties)                            | NA            | Skunk        | 12.01                                         | 8.48                                                 |
| 2 | Unnamed Creek (Iowa DOT – 21, 22 & I-80 Rest Stop) (Dallas County) | 1456          | Des Moines   | 0.4                                           | 0.4                                                  |
| 3 | Unnamed Creek (New Hartford, City of WWTP) (Butler County)         | 1470          | Iowa-Cedar   | 0.1                                           | 0.1                                                  |
| 4 | Unnamed Creek #1 (West Point, City of STP) (Lee County)            | 1284          | Skunk        | 0.88                                          | 0.88                                                 |

#### 7. Class A3 Stream Segments

|   | <b>Stream Name</b>                                | <b>UAA ID</b> | <b>Basin</b> | <b>Class A2 Stream Segment Length (miles)</b> | <b>Aquatic Stream Segment Length (miles)</b> |
|---|---------------------------------------------------|---------------|--------------|-----------------------------------------------|----------------------------------------------|
| 1 | Buttermilk Creek (Wright County)                  | 1465          | Des Moines   | 0.5                                           | NA                                           |
| 2 | Dry Creek (Linn County)                           | 1480          | Iowa-Cedar   | 8.2                                           | NA                                           |
| 3 | West Branch Floyd River (Plymouth/Sioux Counties) | 1401          | Western      | 4.41                                          | NA                                           |
| 4 | West Branch Floyd River (Plymouth/Sioux Counties) | 1403          | Western      | 3.37                                          | NA                                           |
| 5 | West Branch Floyd River (Plymouth/Sioux Counties) | 1405          | Western      | 2.74                                          | NA                                           |

8. Class A3, B(WW-2) Stream Segments

|    | <b>Stream Name</b>                                                        | <b>UAA ID</b> | <b>Basin</b> | <b>Class A2 Stream Segment Length (miles)</b> | <b>B(WW-2) Aquatic Stream Segment Length (miles)</b> |
|----|---------------------------------------------------------------------------|---------------|--------------|-----------------------------------------------|------------------------------------------------------|
| 1  | Blackhawk Creek (Scott County)                                            | 833           | Northeastern | 5.45                                          | 5.45                                                 |
| 2  | Coon Creek (Tama County)                                                  | 1468          | Iowa-Cedar   | 0.5                                           | 0.5                                                  |
| 3  | Gypsum Creek (Webster County)                                             | 1463          | Des Moines   | 1.3                                           | 1.3                                                  |
| 4  | Soap Creek (Lee County)                                                   | 948           | Skunk        | 2.84                                          | 2.84                                                 |
| 5  | Unnamed Creek (aka, 7 <sup>th</sup> Ward Ditch) (Polk County)             | 152           | Des Moines   | 5.2                                           | 5.2                                                  |
| 6  | Unnamed Creek (Clow Valve) (Mahaska County)                               | 1424          | Skunk        | 1.0                                           | 1.0                                                  |
| 7  | Unnamed Creek (Corn LP) (Wright County)                                   | 1464          | Des Moines   | 0.3                                           | 0.3                                                  |
| 8  | Unnamed Creek (Des Moines International Airport Outfall #3) (Polk County) | 1459          | Des Moines   | 1.0                                           | 1.0                                                  |
| 9  | Unnamed Creek (Nevada, City of WWTP) (Story County)                       | 1412          | Skunk        | 0.03                                          | 0.03                                                 |
| 10 | Unnamed Creek (Pella Corp.) (Marion County)                               | 1423          | Des Moines   | 0.3                                           | 0.3                                                  |
| 11 | Unnamed Creek (Tama Paperboard) (Tama County)                             | 1474          | Iowa-Cedar   | 0.7                                           | 0.7                                                  |
| 12 | Unnamed Creek (University of Northern Iowa) (Black Hawk County)           | 1469          | Iowa-Cedar   | 0.2                                           | 0.2                                                  |
| 13 | Unnamed Creek #2 (Atkins, City of WTF) (Benton County)                    | 1503          | Iowa-Cedar   | 0.3                                           | 0.3                                                  |
| 14 | Unnamed Creek #3 (John Deere Engine Works) (Black Hawk County)            | 1482          | Iowa-Cedar   | 1.2                                           | 1.2                                                  |
| 15 | Unnamed Creek #4 (John Deere Engine Works) (Black Hawk County)            | 1484          | Iowa-Cedar   | 0.5                                           | 0.5                                                  |
| 16 | Yeader Creek (Polk County)                                                | 1458          | Des Moines   | 0.5                                           | 0.5                                                  |

9. Administrative Name Changes

|   | <b>Stream Name</b>               | <b>UAA ID</b> | <b>Basin</b> | <b>Stream Segment Length (miles)</b> | <b>Aquatic Stream Segment Length (miles)</b> |
|---|----------------------------------|---------------|--------------|--------------------------------------|----------------------------------------------|
| 1 | Chiak Creek to Chihaks Creek     | 1268          | Northeastern | NA                                   | NA                                           |
| 2 | West Indian Creek (Story County) | 1002          | Skunk        | NA                                   | NA                                           |

10. Previously EPC-Approved, SWC-Omitted Stream Segments

|   | <b>Stream Name</b>                                      | <b>UAA ID</b> | <b>Basin</b> | <b>Stream Segment Length (miles)</b> | <b>Aquatic Stream Segment Length (miles)</b> |
|---|---------------------------------------------------------|---------------|--------------|--------------------------------------|----------------------------------------------|
| 1 | Middle Branch Boone River (Wright/Hancock Cos.)         | NA            | Des Moines   | 11.50                                | 4.0                                          |
| 2 | Unnamed Creek #1 (Calmar, City of STP) (Winneshiek Co.) | NA            | Northeastern | 1.40                                 | 1.40                                         |

A Jobs Impact Statement (JIS) have been prepared for this Notice and is available upon request. The DNR believes the rulemaking will not impact jobs since passage of this rule package does not add to the burden/cost established by the 2006 rule package. Wastewater treatment facilities in Iowa, particularly local government owned wastewater facilities are significantly impacted by the 2006 water quality standard changes. Passage of this rule package does not add to the burden/cost established by the 2006 rule package but does allow for the implementation of those prior requirements. Based upon the number of facilities impacted by this package, it is estimated that between \$46 million and \$64 million will be spent on facility upgrades. These upgrades will be implemented upon approval of the renewed NPDES permit for the facility. These figures may change based upon other factors, including inflation and varying construction costs.

It is important to understand that by revising the stream designations to reflect the appropriate uses, rather than the presumed uses, the proposed rule will not increase the potential compliance costs for any necessary facility upgrades in any way. When compared to the costs of implementation of the presumed uses, the cost of implementing the revised designations will always be the same or less.

Additional information on Iowa's Water Quality Standards, including the JIS and detailed maps of the stream assessments, can be found on the Department's Web site

at <http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterQualityStandards/DesignatedUses/UseAssessments.aspx>

Any person may submit written suggestions or comments on the proposed rule through March 27<sup>th</sup>, 2015. If comments submitted are intended to describe recreational activities occurring on specific stream segments, the comment must specify: 1) the type of water recreational activity(ies) (e.g., canoeing, children's play, minnow seining, etc.); 2) where the activity(ies) took place (e.g., bridge crossing, park, etc.) using Section/Township/Range, latitude/longitude, address, or map; and 3) the frequency the activity(ies) occur(red) and when (e.g., once a month in the summer). Such written material should be submitted to Matthew Dvorak, Iowa Department of Natural Resources, Wallace State Office Building, 502 East 9th Street, Des Moines, Iowa 50319; fax (515) 725-8202; or E-mail [matthew.dvorak@dnr.iowa.gov](mailto:matthew.dvorak@dnr.iowa.gov). Persons who have questions may contact Matthew Dvorak at (515) 725-8397.

Persons are invited to present oral or written comments at a series of public hearings, which will be held throughout the state as follows:

| Date ~~TBD~~ March 10, 2015 Time ~~TBD~~ 9:00 A.M.  
Atlantic Municipal Utilities Conference Room  
15 W. 3<sup>rd</sup> St.  
Atlantic, Iowa

| Date ~~TBD~~ March 24, 2015 Time ~~TBD~~ 3:30 P.M.  
Spencer Public Library  
21 E. 3<sup>rd</sup> St.  
Spencer, Iowa

| Date ~~TBD~~ March 17, 2015 Time ~~TBD~~ 9:30 A.M.  
Falcon Civic Center  
1305 5th Ave NE  
Independence, Iowa

| Date ~~TBD~~ March 17, 2015 Time ~~TBD~~ 3:00 P.M.  
Washington Public Library  
115 West Washington St.  
Washington, Iowa

Date ~~TBD~~ March 24, 2015 Time ~~TBD~~ 10:00 A.M.  
Clear Lake Community Meeting Room  
15 N. 6<sup>th</sup> St.  
Clear Lake, IA

Date ~~TBD~~ March 10, 2015 Time ~~TBD~~ 2:30 P.M.  
West Des Moines Public Library  
4000 Mills Civic Parkway  
West Des Moines, Iowa

Any person who plans to attend a public hearing and has special requirements, such as those related to hearing or mobility impairments, should contact the Department and advise of specific needs.

This amendment is intended to implement Iowa Code chapter 455B, division III, part 1.

The following amendment is proposed.

Amend subrule 61.3(5) as follows:

**61.3(5)** Surface water classification. The department hereby incorporates by reference “Surface Water Classification,” effective ~~May 16, 2012~~ [effective date of rule to be inserted].

This document may be obtained on the department’s Web site at:

<http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterQualityStandards/Rules.aspx>

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Date

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Chuck Gipp, Director

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

## Ongoing Environmental Accomplishments

In 2014 the Commission continued to support the work of improving our state's water quality, a frequent topic of public comment. We approved contracts for numerous water quality monitoring projects, stream bank erosion, and watershed protection programs. There is evidence of progress being made, which supports need for continued funding.

The Derelict building grant program has benefitted dozens of small communities with ongoing efforts to address abandoned buildings. Solid Waste Alternative programs support an array of unique and ever-expanding efforts to divert material from landfills to be reused. Iowa should be proud of this progress.

In Air Quality the Title V fee was kept at \$56/ton in spite of a 1.8 million budget shortfall for fiscal 2015 by receiving a 1.4 million allocation from HF 2473 Hazardous household waste fund along with using unspent funds from 2014. A legislative stakeholder group was established to study the current Air Quality program as the Clean Air Act mandates that fees cover the programs.

## Environmental Accomplishment through the Writing and Enactment of Rules of Substance.

Chapter 93 - A Non-Point Source pollution control set-aside program was expanded to allow homeowner's inside city limits and without public sewer connection to access low interest loan programs.

Chapter 64- Improvements to wastewater and construction operation permits to allow for easier transfer and duplicate public notice.

Chapter 61 - Water Quality Standards Certificate of Regional Permit #7 amendments to text

Chapter 22 and 23 - Best Management Practices for Grain Elevators and Adoption of Federal Air Toxic Standards. This attempts to minimize dust when vacuuming grain and

giving Iowa DNR primary implementation authority for regulations concerning National Emission Standards for Hazardous Air Pollutants (NESHAP).

Chapter 64 and 65 Amendments requiring CAFO's to comply with NPDES requirements. After more than a year in hearings and deliberations and after reading countless comments and listening to over an hour of public comment at the meeting, the commission unanimously approved this very controversial rule. It complies with the work plan agreed upon by EPA and the DNR in September of 2013 and adds another layer of protection to water quality with livestock regulations.

The \$700,000 in appropriations from the legislature for seven new field inspectors for animal feeding operations assists the Department with meeting the obligations of the workplan. New internet access training for Certified Manure Applicators is another example of continued improvement and progress.

## Stakeholder Groups

Stakeholder group input was at the forefront of several meetings this year as 3 important and controversial areas seemed to need further regulatory refinement.

The three include the following:

The recommendation of the group on topsoil preservation requirements in storm water construction permit #2 was not unanimous by either the stakeholder group or the commission on whether to move forward with new rulemaking. This is a controversial and difficult topic, further discussion and input will be needed as the item proceeds to the rule-making process.

We also heard 2 presentations from a stakeholder group on the Jordan Aquifer and how best to protect Iowa's largest underground water source. We will take this up again in 2015 as more refinement was needed to move to rulemaking.

The Air Quality Title V fee group recommendations have been submitted to the legislature as of December 1, 2014.

## Environmental Accomplishment through Enforcement and Judicial Action

The Commission had Appeals of Administrative orders, AG referrals, and contested cases on everything from horse burial at pet cemeteries to solid waste violations. The various county supervisors continue to request Demand for Hearings over the Master Matrix evaluations concerning livestock building permits.

The department as a whole had assessed fines totaling \$77,215 and 4 referrals to the AG office.

## Summary and Recommendations

The Environmental Protection Commission recommends funding beyond the base budget request due to overhead increases, with the goal being to maintain the staff required to fulfill the commitments of the work plan agreement between EPA Region 7 and the Department of Natural Resources. Financial resources are necessary to maintain responsible and reliable environmental programs to protect and enhance lives of all Iowa citizens. The public is loud and clear on the priority of clean water in our state, it is also clear that this goal requires ongoing support and collaborative effort. The IDNR can only hold up their end of the effort if they are funded to do so.

The Commission recommends legislative review to increase the legal limits on fines the department can levy upon polluters and repeat violators. These fines were established decades ago and need revision for current standards.

The Commission supports Iowa's Nutrient Reduction Strategy and encourages increased legislative support including IDALS additional \$7.5 million in cost-sharing programs along with the collaborative efforts of IDNR and Iowa State University. As you know, IDNR is responsible for the point-source side of regulation. Communities are being required to monitor and develop plans for nutrient reduction at a cost of \$15-40,000 just for the plan. Please support funding for these efforts as they present themselves.