

Subject: Finding of No Significant Environmental Impact and Necessary Environmental Findings for Lincolnway Energy, LLC Installation of Biofuel Material Handling Infrastructure to existing Ethanol Facility Nevada, Iowa
9004 Repowering Assistance Program

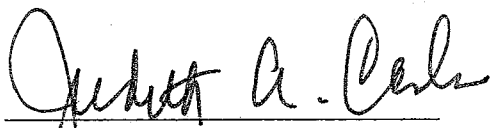
To: Project File

The attached environmental assessment for the subject proposal has been prepared and reviewed by the appropriate Rural Development official(s). After reviewing the assessment and the supporting materials attached to it, I find that the subject proposal will not significantly affect the quality of the human environment. Therefore, the preparation of an environmental impact statement is not necessary.

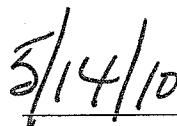
I also find that the assessment properly documents the proposal's status of compliance with the environmental laws and requirements listed therein.

Conditions:

- a. The applicant must provide a copy of all air quality permit(s) and permit modification(s) for the project prior to the issuance of any RD funding. If no air quality permit(s) or modification(s) are required for the project, then documentation must be submitted substantiating this claim.



JUDITH A. CANALES
Administrator
Rural Business and Cooperative Service



Date

Position 3

USDA-Rural Development
Form RD 1940-21
(Rev. 6-88)

ENVIRONMENTAL ASSESSMENT FOR CLASS I ACTION

1. Description

- a. Name of Project: Lincolnway Energy, LLC
- b. Project Number: IA-1015
- c. Location: 59511 Lincoln Highway, Nevada, IA 50201 (Story County)

2. Protected Resources

The following land uses or environmental resources will either be affected by the proposal or are located within the project site. (Check appropriate box for every item of the following checklist. If more than one item is checked "yes" the environmental assessment format for a Class II action must be completed, except if the action under review is either (1) an application for a Housing Preservation Grant or (2) normally a categorical exclusion that has lost its exclusion status. The reviewer should not initiate the Assessment for a Class I action when it is obvious that the assessment format for a Class II action will be required.)

| | YES | NO |
|--|--------------------------|-------------------------------------|
| a. Wetlands | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Floodplains | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Wilderness (designated or proposed under the Wilderness Act) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Wild or Scenic River (proposed or designated under the Wild and Scenic Rivers Act) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Historical, Archeological Sites | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>(listed on the National Register of Historic Places or which may be eligible for listing)</i> | | |
| f. Critical Habitat or Endangered/Threatened Species (listed or proposed) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Coastal Barrier included in Coastal Barrier Resources System | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Natural Landmark (listed on National Registry of Nature Landmark) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i. Important Farmlands | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j. Prime Forest Lands | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| k. Prime Rangeland | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| l. Approved Coastal Zone Management Area | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| m. Sole Source Aquifer Recharge Area | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>(designated by Environmental Protection Agency)</i> | | |

For an item checked "yes", I have attached as Exhibit I both the necessary documentation to demonstrate compliance with the Agency's requirements for the protection of the resource and a discussion setting forth the reasons why the potential impact on the resource is not considered to be significant. If item e. is checked "no", the results of the consultation process with the State Historic Preservation Officer is also attached.

3. General Impacts

I have reviewed the environmental data submitted, dated and signed by the applicant as well as any previously completed environmental impact analysis and conclude the following:

- a. The project, the project area, and the primary beneficiaries are adequately identified;
- b. No incompatible land uses will be created nor direct impacts to parks, beaches, dunes, barrier islands, or important wildlife habitats or recreational areas; and
- c. Only minimal impacts or no impacts will result to the following checked items:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Wildlife |
| <input checked="" type="checkbox"/> Water Quality | <input checked="" type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Solid Waste Management | <input checked="" type="checkbox"/> Construction Impacts |
| <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Secondary Impacts |
| <input checked="" type="checkbox"/> Noise | |

An analysis of an item which cannot be checked, therefore having a potential for more than minimal impacts, is attached as Exhibit _____.
(If more than one item is unchecked, the environmental assessment format for a Class II action must be completed).

4. State, Regional and/or Local Government Consultation

- Yes No This project is subject to review by State, regional, or local agencies under the requirements of Executive Order 12372, Intergovernmental Review of Federal Programs.

If "Yes" is checked, complete (a), or (b) or (c). (If negative environmental comments have been received, the environmental assessment format for a Class II action must be completed).

- a. The review period has expired and no comments were received.
- b. No negative comments of an environmental nature were received and the review period is complete, with the comments attached.
- c. Negative comments of an environmental nature have been received.

5. Controversy

- Yes No This action is controversial for environmental reasons or is the subject of an environmental complaint. If yes, check one of the following::

- The action is the subject of isolated environmental complaints or questions have been raised which focus on a single impact. Attached as Exhibit _____ is an analysis of the complaint or questions, and no further analysis is considered necessary.

6. Cumulative Impacts

- Yes No The cumulative impacts of this action and other Rural Development actions, other federal actions, or related nonfederal actions exceed the criteria for a Class I action; or the action represents a phase or segment of a larger project, the latter which exceeds the criteria for a Class I action.

7. Need for the Project and Alternatives to it

Attached as Exhibit A is a brief statement of Rural Development's position regarding the need for the project. Also, briefly discussed are (a) the alternatives which have been considered by the applicant and Rural Development and (b) the environmental impacts of these alternatives. Alternatives include alternative locations, alternative designs, alternative projects having similar benefits, and no action.

8. Measures to Avoid or Mitigate Adverse Environmental Impacts

- Yes No Mitigation measures are required. Attached as Exhibit B is a description of the site or design change that the applicant has agreed to make as well as mitigation measures that will be placed as special condition within the offer of financial assistance or subdivision approval.

9. Compliance With Highly Erodible Land and Wetland Conservation Requirements

- Yes No This action is subject to the highly erodible and wetland conservation requirements contained in Exhibit M of RD Instruction 1940-G.

If "yes" is checked, complete (a), (b), (c), and (d).

a. Attached as Exhibit _____ is a completed Form SCS-CPA-026 which documents the following:

- Yes No Highly erodible land is present on the farm property.
- Yes No Wetland is present on the farm property.
- Yes No Converted wetland is present on the farm property.

b. Yes No This action qualifies for the following exemption allowed under Exhibit M :

c. Yes No The applicant must complete the following requirements prior to approval of the action in order to retain or regain its eligibility for Agency financial assistance:

d. Yes No Under the requirements of Exhibit M, the applicant's proposed activities are eligible for Agency financial assistance.

10. Environmental Determinations

The following recommendations shall be completed and the environmental reviewer shall sign the assessment in the space provided below.

a. Based on an examination and review of the foregoing information and such supplemental information attached hereto, I recommend that the approving official determine that this project:

- will have a significant effect on the quality of the human environment and an Environmental Impact Statement must be prepared;
- will not have a significant effect on the quality of the human environment,
- will require further analysis through completion of the assessment format for a Class II action.

b. I recommend that the approving official make the following compliance determinations for the below listed environmental requirements.

| Not In Compliance | In Compliance | |
|--------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Clean Air Act |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Federal Water Pollution Control Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Safe Drinking Water Act-Section 1424(e) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Endangered Species Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Coastal Barrier Resources Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Coastal Zone Management Act-Section 307(c)(1) and (2) |
| <input type="checkbox"/> | <input type="checkbox"/> | Wild and Scenic Rivers Act |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | National Historic Preservation Act |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Archeological and Historic Preservation Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Highly Erodible Land and Wetland Conservation, Food Security Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Executive Order 11988, Floodplain Management |
| <input type="checkbox"/> | <input type="checkbox"/> | Executive Order 11990, Protection of Wetlands |
| <input type="checkbox"/> | <input type="checkbox"/> | Farmland Protection Policy Act |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Departmental Regulation 9500-3, Land Use Policy |
| <input type="checkbox"/> | <input type="checkbox"/> | State Office Natural Resource Management Guide |

c. I have reviewed and considered the types and degrees of adverse environmental impacts identified by this assessment. I have also analyzed the proposal for its consistency with Rural Development environmental policies, particularly those related to land use, and have considered the potential benefits of the proposal. Based upon a consideration and balancing of these factors, I recommend from an environmental standpoint that the project

- be approved
- not be approved because of the attached reasons (see Exhibit _____).

Frederic P. Mancoske
 Signature of Preparer*

1/13/2010
 Date

Title Environmental Protection Specialist

*See Section 1940.302 for listing of officials responsible for preparing assessment.

Justin A. Clark
Signature of Concurring Official 1

5/14/10
Date

Title ADMINISTRATOR

I have reviewed this environmental assessment and supporting documentation. Following are my Positions regarding its adequacy and the recommendations reached by the preparer. For any matter in which I do not concur, my reasons are attached as Exhibit N/A

Do not
Concur

Concur

-
-
-
-

- Adequate Assessment
- Environmental Impact Determination
- Compliance Determinations
- Project Recommendation

Paul Rodgers
Signature of State Environmental Coordinator 2
National Office - Acting Director PSS

5/14/2010
Date

¹ See Section 1940.316 for both the instances when a concurring official must sign the assessment and who is authorized to sign as the concurring official.
² See Section 1940.316 for instances when State Environmental Coordinator's review is required.

Appendix A

Project Description

Rural Development proposes to provide financial assistance to Lincolnway Energy, LLC for purchase and installation of material handling infrastructure related to the use of biofuels to replace coal combustion at the Lincolnway Ethanol Plant. Lincolnway is located at 59511 West Lincolnway Highway, Nevada, IA 30201-Story County). Lincolnway Energy is an ethanol plant that produces approximately 55 million gallons of ethanol (and other feed products)/year, and consumes approximately 300 tons of coal/day. The proposal would convert an existing fuel combustion system from coal to biofuels, most likely surplus wood from the surrounding areas of Story County. Conversion would require the construction of a storage building, wheel loader, screeners, silos and metering bins for the storage and testing of the biofuels prior to combustion in the fluidized bed reactor. The proposed storage area is approximately 3-4 acres and within the existing plant site, located north of the administration building (as shown on attached map). The entire plant area was graded and profoundly disturbed during construction in 2004-2005; the proposed site is graded and has turf grass growing on it.

Alternatives Considered

No Action

If RD takes no action on providing financial assistance, Lincolnway Energy could still proceed with the action to install the material handling infrastructure to process and burn wood in place of coal in the existing system. The economics of the changeover would be a longer term to return the investment but the environmental impacts would be the same as under the proposed action. Should Lincolnway not proceed with fuel switching on the basis of denied RD funding, the impacts of burning approximately 100,000 tpy of sub bituminous coal would continue. In general, coal burning releases more environmental contaminants, as well as greenhouse gases, than woody products. Therefore, No Action could result in the continuation of adverse environmental impacts to air quality which is not significant.

Appendix B- Mitigation

Lincolnway will need revised air quality permits from the State of Iowa. This is due to the fact that changes in fuel from coal to wood will result in changes in air emissions. The estimated emissions and comparisons for different levels of fuels and types are estimated below.

Table 1 – Projected Emissions

| Compound | Existing Coal (TPY) | 50% Wood (TPY) | 100% Wood (TPY) |
|--------------|---------------------|----------------|-----------------|
| PM | 24.1 | 19.5 | 14.8 |
| PM10 | 24.1 | 19.5 | 14.8 |
| NOx | 125.3 | 224.9 | 323.3 |
| SOx | 86.7 | 44.3 | 1.8 |
| CO | 99.3 | 58.6 | 17.9 |
| VOC | 18.6 | 18.8 | 18.9 |
| HCl | 8.7 | 4.3 | 0 |
| HF | 4.3 | 2.2 | 0 |
| TOTAL | 391.1 | 392.1 | 391.5 |

TPY- Tons/year

Source: Lincolnway Energy, LLC

As can be seen, the overall tonnage of projected emissions remains relatively the same compared to the existing coal burning but the type compound emitted changes for a number of pollutants, in most cases, reducing pollutants such as HCL, HF, and SOx while increasing the overall level of NOx emissions. Therefore, it is recommended as mitigation that Lincolnway provide a copy of all revised air quality permits prior to RD funding of this project.

Rural Development
Environmental Justice (EJ) and Civil Rights Impact Analysis (CRIA)
Certification

1. Applicant's name and proposed project description: Lincolnway Energy, LLC proposes to switch from burning coal in its fluidized bed combustor to woody biomass

2. Rural Development's loan/grant program/guarantee or other Agency action: RD gives Lincolnway an annual payment based upon the fossil fuel replaced by renewable fuel. (Section 9004)

3. Attach a map of the proposal's area of effect identifying location or EJ populations, location of the proposal, area of impact or

Attach results of EJ analysis from the Environmental Protection Agency's (EPAs) EnviroMapper with proposed project location and impact footprint delineated.

4. Does the applicant's proposal or Agency action directly, indirectly or cumulatively affect the quality and/or level of services provided to the community?

Yes No N/A

5. Is the applicant's proposal or Agency action likely to result in a change in the current land use patterns (types of land use, development densities, etc)?

Yes No N/A

6. Does a demographic analysis indicate the applicant's proposal or Agency's action may disproportionately affect a significant minority and/or low-income populations?

Yes No N/A

If answer is no, skip to item 12. If answer is yes, continue with items 7 through 12.

7. Identify, describe, and provide location of EJ population _____

8. If a disproportionate adverse affect is expected to impact an EJ population, identify type/level of public outreach implemented. _____

9. Identify disproportionately high and adverse impacts on EJ populations. _____

10. Are adverse impacts appreciably more severe or greater in magnitude than the adverse impacts expected on non-minority/low-income populations?

Yes No N/A

11. Are alternatives and/or mitigation required to avoid impacts to EJ populations?

Yes No N/A

If yes, describe _____

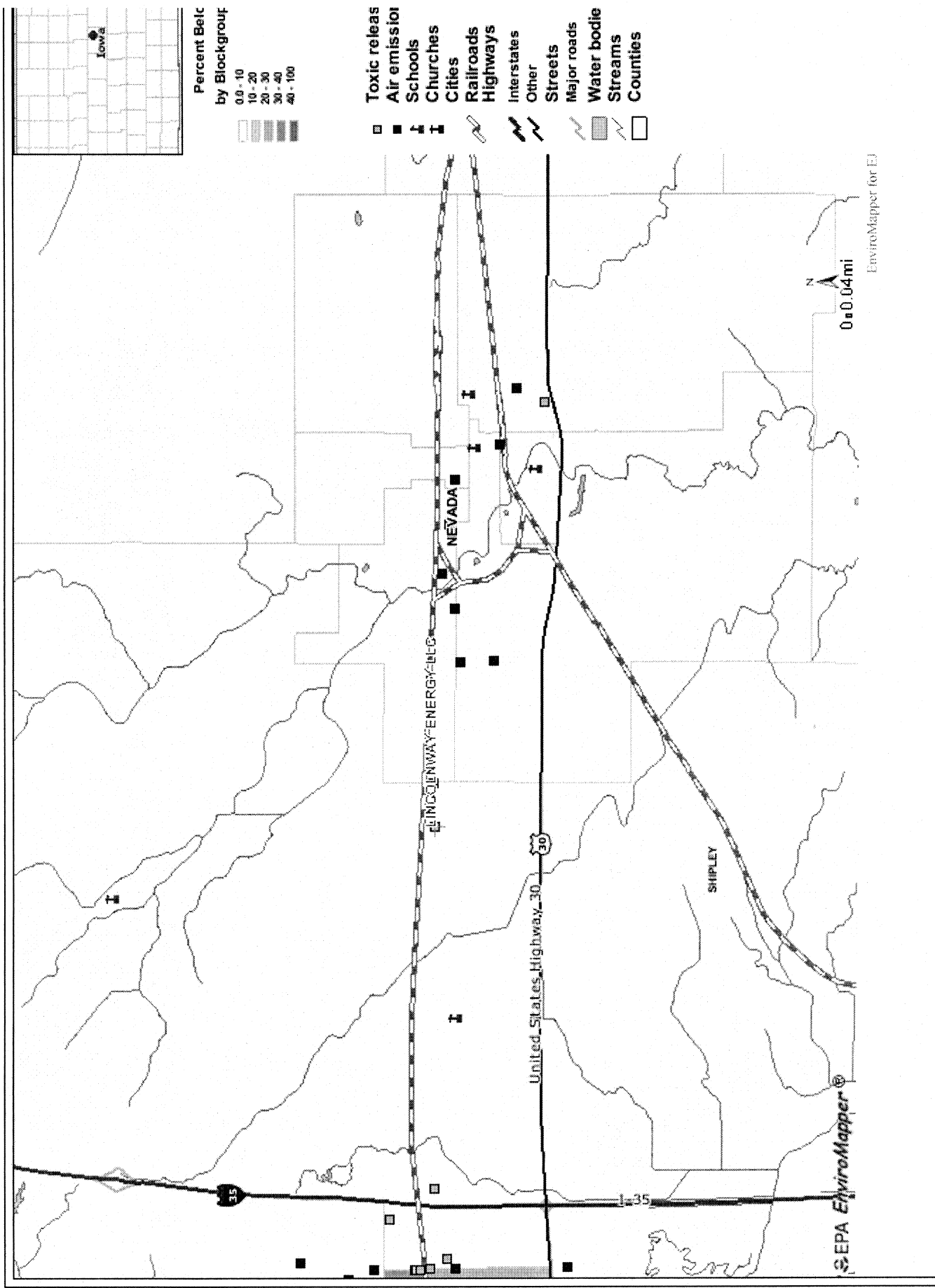
12. I certify that I have reviewed the appropriate documentation and have determined that:

No major EJ or civil rights impact is likely to result if the proposal is implemented.
 A major EJ or civil rights impact is likely to result if the proposal is implemented.

Kruse P. Mancio
Name and Title of Certifying Official

1/14/2010
Date





State & County QuickFacts

Story County, Iowa

| People QuickFacts | Story County | Iowa |
|---|---------------------|------------------------|
| Population, 2008 estimate | 86,754 | 3,002,555 |
| Population, percent change, April 1, 2000 to July 1, 2008 | 8.5% | 2.6% |
| Population estimates base (April 1) 2000 | 79,981 | 2,926,381 |
| Persons under 5 years old, percent, 2008 | 5.7% | 6.7% |
| Persons under 18 years old, percent, 2008 | 18.3% | 23.7% |
| Persons 65 years old and over, percent, 2008 | 10.3% | 14.8% |
| Female persons, percent, 2008 | 48.3% | 50.6% |
| White persons, percent, 2008 (a) | 90.6% | 94.2% |
| Black persons, percent, 2008 (a) | 2.3% | 2.7% |
| American Indian and Alaska Native persons, percent, 2008 (a) | 0.2% | 0.4% |
| Asian persons, percent, 2008 (a) | 5.7% | 1.6% |
| Native Hawaiian and Other Pacific Islander, percent, 2008 (a) | 0.1% | 0.1% |
| Persons reporting two or more races, percent, 2008 | 1.2% | 1.1% |
| Persons of Hispanic or Latino origin, percent, 2008 (b) | 2.2% | 4.2% |
| White persons not Hispanic, percent, 2008 | 88.6% | 90.3% |
| Living in same house in 1995 and 2000, pct 5 yrs old & over | 39.3% | 56.9% |
| Foreign born persons, percent, 2000 | 6.9% | 3.1% |
| Language other than English spoken at home, pct age 5+, 2000 | 9.4% | 5.8% |
| High school graduates, percent of persons age 25+, 2000 | 93.5% | 86.1% |
| Bachelor's degree or higher, pct of persons age 25+, 2000 | 44.5% | 21.2% |
| Persons with a disability, age 5+, 2000 | 7,916 | 446,665 |
| Mean travel time to work (minutes), workers age 16+, 2000 | 16.9 | 18.5 |
| Housing units, 2008 | 34,466 | 1,329,352 |
| Homeownership rate, 2000 | 58.3% | 72.3% |
| Housing units in multi-unit structures, percent, 2000 | 33.8% | 18.4% |
| Median value of owner-occupied housing units, 2000 | \$115,800 | \$82,500 |
| Households, 2000 | 29,383 | 1,149,276 |
| Persons per household, 2000 | 2.39 | 2.46 |
| Median household income, 2007 | \$49,104 | \$47,324 |
| Per capita money income, 1999 | \$19,949 | \$19,674 |
| Persons below poverty, percent, 2007 | 14.4% | 11.0% |
| Business QuickFacts | Story County | Iowa |
| Private nonfarm establishments, 2007 | 2,018 | 83,158 ¹ |
| Private nonfarm employment, 2007 | 29,859 | 1,303,436 ¹ |

| | | |
|---|-----------|-------------------------|
| Private nonfarm employment, percent change 2000-2007 | 4.8% | 3.0% ¹ |
| Nonemployer establishments, 2007 | 5,449 | 202,717 |
| Total number of firms, 2002 | 6,084 | 236,515 |
| Black-owned firms, percent, 2002 | F | 0.7% |
| American Indian and Alaska Native owned firms, percent, 2002 | F | 0.3% |
| Asian-owned firms, percent, 2002 | 2.0% | 0.8% |
| Native Hawaiian and Other Pacific Islander owned firms, percent, 2002 | F | 0.0% |
| Hispanic-owned firms, percent, 2002 | F | 0.6% |
| Women-owned firms, percent, 2002 | 21.8% | 27.0% |
| <hr/> | | |
| Manufacturers shipments, 2002 (\$1000) | 1,023,889 | 65,042,043 |
| Wholesale trade sales, 2002 (\$1000) | 374,102 | 33,546,948 |
| Retail sales, 2002 (\$1000) | 799,934 | 31,195,012 |
| Retail sales per capita, 2002 | \$9,909 | \$10,629 |
| Accommodation and foodservices sales, 2002 (\$1000) | 110,943 | 3,698,955 |
| Building permits, 2008 | 327 | 8,412 |
| Federal spending, 2008 | 590,006 | 23,927,449 ¹ |

| Geography QuickFacts | Story County | Iowa |
|---|---------------------|-------------|
| Land area, 2000 (square miles) | 572.86 | 55,869.36 |
| Persons per square mile, 2000 | 139.6 | 52.4 |
| FIPS Code | 169 | 19 |
| Metropolitan or Micropolitan Statistical Area | Ames, IA Metro Area | |

1: Includes data not distributed by county.

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information

F: Fewer than 100 firms

FN: Footnote on this item for this area in place of data

NA: Not available

S: Suppressed; does not meet publication standards

X: Not applicable

Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report

Last Revised: Tuesday, 17-Nov-2009 11:53:18 EST

January 8, 2010

In reference to R&C: 091285052

Mr. Frank Mancino
USDA Rural Development
1400 Independence Ave. SW MS 0761
Washington, D.C. 20250

RE: RECD – STORY COUNTY – CITY OF NEVADA – LINCOLNWAY ENERGY, LLC – REAP 9004 PROGRAM
– MATERIAL HANDLING INFRASTRUCTURE PROJECT – 59511 LINCOLN HIGHWAY – SEC. 3, T83N-
R23W

Dear Mr. Mancino,

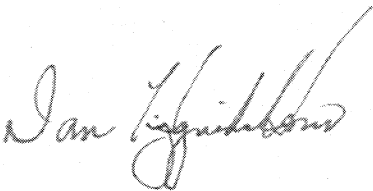
We have received your December 4, 2009 submittal regarding the above-referenced federal undertaking. We make the following comments and recommendations based upon our review of this material and in accordance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470 *et seq.*) and its implementing regulations 36 CFR Part 800 (revised, effective August 5, 2004).

Considering the scope and location of the undertaking, it is our consulting opinion that the proposed action will result in no effects to historic properties. Therefore, based upon the available information, we are able to concur with your determination of 'no historic properties affected.'

If design changes are made for this project which would involve undisturbed new rights-of-way or easements, please forward additional information to our office for further comment along with the Agency Official's determination of effect. If project activities uncover an item(s) that might be of archeological, historical or architectural interest, or if important new archeological, historical or architectural data should be encountered in the project APE, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by a qualified archaeologist.

Do not hesitate to call me at (515) 281-8744 or email me at daniel.higginbottom@iowa.gov if you have any questions or require further assistance in this matter.

Sincerely,



Daniel K. Higginbottom, Archaeologist
Iowa State Historic Preservation Office

Cc: Lee Merrick, State Environmental Coordinator, USDA Rural Development

REQUEST FOR SHPO COMMENT ON A PROJECT

Submit one copy with each property for which our comment is requested. Please print or type.

Return to: State Historical Society of Iowa, State Historic Preservation Office, 600 E. Locust St, Des Moines, IA 50319-0290

I. GENERAL INFORMATION

- This is a new submittal
This is more information relating to SHPO R&C #:

- a. Property Name: Lincolnway Energy, LLC
b. Property Street & Number: 59511 Lincoln Highway
c. County: Story City: Nevada Zip: 50201
d. Federal Agency: USDA, Rural Development Federal Funding Program/Permit: REAP 9004 Program
e. Agency Project No.: If HUD, circle one: 24 CFR Part 50 or Part 58
f. Contact Person on Project: Frank Mancino Phone: 202-720-1827
g. Contact Address: 1400 Independence Ave, SW MS 0761 Washington, DC Zip: 20250
email: frank.mancino@wdc.usda.gov

II. IDENTIFICATION OF HISTORIC PLACES

Scope of Effort Applied

- As agreed in programmatic or other agency agreements with SHPO (if applicable)
Includes the attached elements required under 36 CFR 800.4(a)
1) Area of potential effects, as defined in 800.16(d), is shown on map
2) Existing information has been reviewed on historic properties in the property area at SHPO office and/or other locations of inventory data
3) Information has been sought from parties likely to have knowledge about historic properties in the project area
4) Information gathered from Indian tribes, as appropriate

Identification Results

History and Architecture

- An attached Iowa Site Inventory form is completed for each building 50 years of age or older

Archaeology

- The project will involve excavation
If yes, submit all of the following information (use attachments of necessary)
1) Precise project location map (preferably U.S.G.S. 7.5 min Quad with name, date, & location)
2) Site plan showing limits of proposed excavation
3) Number of acres in project 3-4
4) Legal location: Section(s) 3 Township(s) 83N Range(s) 23W
5) Description of width and depth of proposed excavation and current conditions of project area

III. APPLICANT CERTIFICATION (Check Either Adverse Effect or No Adverse Effect for Historic Property Affected category)

Findings (Check One)

- No historic properties will be affected (i.e., none are present or there are historic properties present but the project will have no effect upon them) and adequate documentation under 800.11 is provided, including:
1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary and
2) A description of the steps taken to identify historic properties, including, as appropriate, efforts to seek information pursuant to 800.4(b) and
3) The basis for determining that no historic properties are present or affected.
I understand that the SHPO has 30 days from receipt to object to the finding, after which the applicant's responsibilities under Section 106 of the Historic Preservation Act are fulfilled.

- An historic property will be affected for which documentation is provided as required in 36 CFR Part 800.11(e) and, in applying the criteria of adverse effect under 800.5, propose that the project be considered to have (Check One):
A No Adverse Effect under which, in consultation with the SHPO, the project will be modified or conditions imposed to avoid adverse effects. I understand that failure of the SHPO to provide a dated response within 30 days from receipt to the finding shall be considered agreement of the SHPO with the finding
An Adverse Effect is found and the applicant, or other federally authorized representative, will consult with the SHPO and other consulting parties to resolve the adverse effect under 800.6

Federally Authorized Signature: Frank P. Mancino Date: 12/04/2009
Type name below -> Frank Mancino, Environmental Protection Specialist, RD, USDA

IV. STATE HISTORIC PRESERVATION OFFICE COMMENT

Form with checkboxes: Agree with the finding in section III above (move to reader's file), Object to the finding for reasons indicated in attached letter, Cannot review until information is sent as follows, See attached follow-up letter. Includes Authorized Signature and Date fields.

Attachment 1

II 36 CFR 800.4(a)

1. Area of potential effects (APE), as defined in 800.16(d), is shown on the attached maps. The APE is defined as the site footprint.
2. A review of the Iowa OAS and GIS files show no historic properties in the property area.
3. No known Tribal resources are in this area.

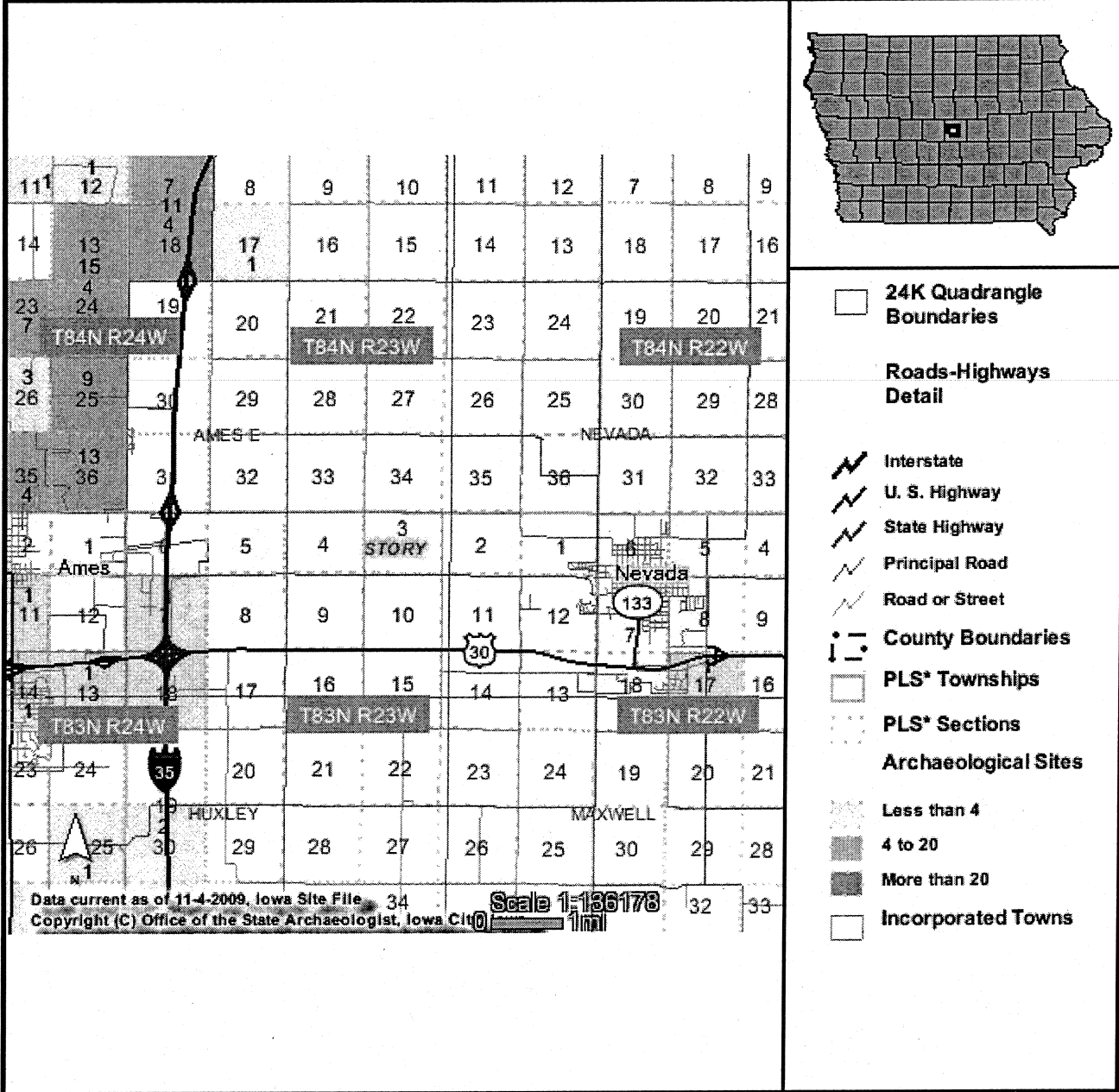
III Findings

1. Undertaking Description

Rural Development proposes to provide financial assistance to Lincolnway Energy, LLC for purchase and installation of material handling infrastructure related to the use of biofuels to replace coal combustion at the Lincolnway Ethanol Plant. Lincolnway is located at 59511 West Lincolnway Highway, Nevada, IA 30201-Story County). Lincolnway Energy is an ethanol plant that produces approximately 55 million gallons of ethanol (and other feed products)/year, and consumes approximately 300 tons of coal/day. The proposal would convert an existing fuel combustion system from coal to biofuels, most likely surplus wood from the surrounding areas of Story County. Conversion would require the construction of a storage building, wheel loader, screeners, silos and metering bins for the storage and testing of the biofuels prior to combustion in the fluidized bed reactor. The proposed storage area is approximately 3-4 acres and within the existing plant site, located north of the administration building (as shown on attached map). The entire plant area was graded and profoundly disturbed during construction in 2004-2005; the proposed site is graded and has turf grass growing on it (as show in attached photos).

2. Survey of Iowa databases of existing historic resources show no historic structures eligible for, or listed on the National Register of Historic Places within at least 1 mile of the ethanol plant.
3. The basis for determining that no historic properties are present or affected is: a) the plants buildings and structures are less than 50 years old; and b) the site has been graded and profoundly disturbed during plant construction.

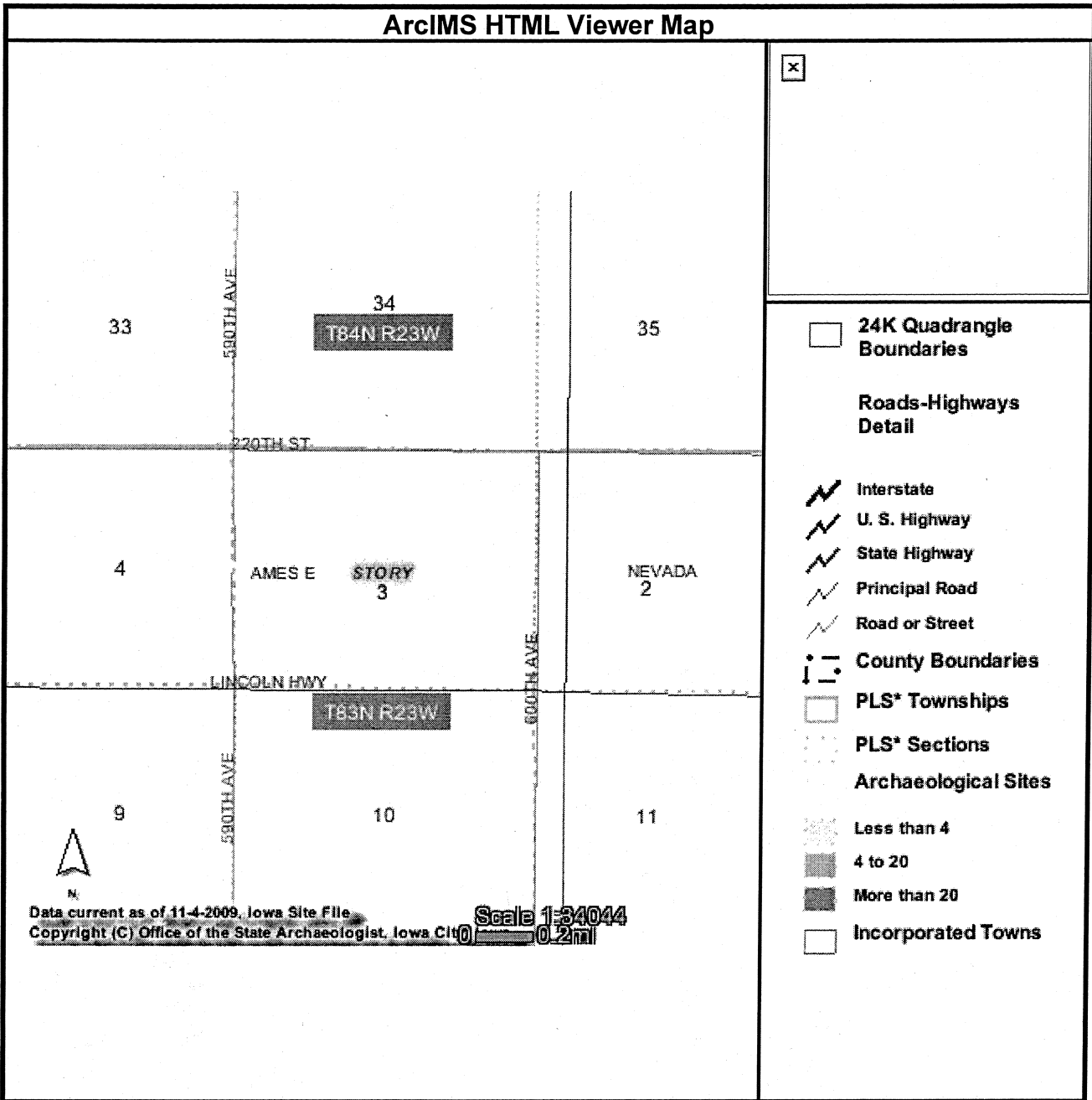
ArcIMS HTML Viewer Map

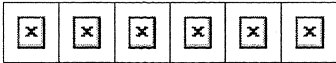


Story County

| Property | Address | City | Date Listed |
|---|---|------------------|-------------|
| Ames High School | 515 Clark Avenue | Ames | 10/24/2002 |
| Bandshell Park Historic District | Bounded by Duff Ave., E. 5 th Street, E. 6 th Street and Carroll Ave. | Ames | 10/7/1999 |
| Budd, Prof. J.L., Sarah M., and Etta Budd, House | 804 Kellogg Avenue | Ames | 08/08/2001 |
| Calamus Creek Bridge | 325th Street over Calamus Creek | Maxwell vicinity | 5/15/98 |
| East Indian Creek Bridge | 260th Street over East Indian Creek | Nevada vicinity | 5/15/98 |
| Keigley Branch Bridge | 550th Street over Keigley Branch | Gilbert vicinity | 5/15/98 |
| Skunk River Bridge | 255th Street over Skunk River | Ames vicinity | 5/15/98 |
| Agriculture Hall | Iowa State University | Ames | 06/27/1985 |
| Alumni Hall | Iowa State University campus | Ames | 11/16/1978 |
| Christian Petersen Courtyard Sculptures and Dairy Industry Building | Union Dr. and Wallace Rd. Iowa State University campus | Ames | 04/07/1987 |
| Edwards-Swayze House | 1110 9th Street | Nevada | 11/14/1978 |
| Engineering Hall Union Dr. | Iowa State University campus | Ames | 01/10/1983 |
| Grand Auditorium and Hotel Block | Broad Street | Story City | 01/25/1980 |
| Henryson, Henry T. and Emilie (Wises), House | 619 Grad Avenue | Story City | 04/20/2005 |
| Herschel--Spillman Two-Row Portable Menagerie Carousel | North Park Story Street and Grove Ave. | Story City | 06/06/1986 |
| Home for Science and Technology | | Ames | 1/10/2004 |
| Knapp-Wilson House | Iowa State University campus | Ames | 10/15/1966 |
| Lincoln Township Mausoleum | Cty Rd. E18, N end of Pearl St. | Zearing | 09/27/07 |
| MacDonald Gilmour B. and Edith Craig House | 517 Ash Street | Ames | 05/06/1992 |
| Marston Water Tower | Iowa State University campus | Ames | 05/27/1982 |
| Morrill Hall | Morrill Rd. facing E toward central campus Iowa Street University | Ames | 06/28/1996 |
| Mulcahy Barn | 25623 710th Avenue | Colo | 01/28/2004 |
| Municipal Building | 420 Kellogg Ave. | Ames | 05/02/1997 |
| Octagon Round Barn | Indian Creek Township Off CR S14 | Iowa Center | 06/30/1986 |
| Old Town Historic District | Bet. Duff and Clark Ave., and 7th and 9th Streets | Ames | 1/02/2004 |
| Sheldahl First Norwegian Evangelical Lutheran Church | 3rd and Willow Sts. | Sheldahl | 05/11/1984 |
| Sigma Sigma-Delta Chi Fraternity House | 405 Hayward Ave. | Ames | 7/10/08 |
| Wood William Kennison House | Co. Rd. off S27 | Iowa Center | 06/05/1995 |

ArcIMS HTML Viewer Map

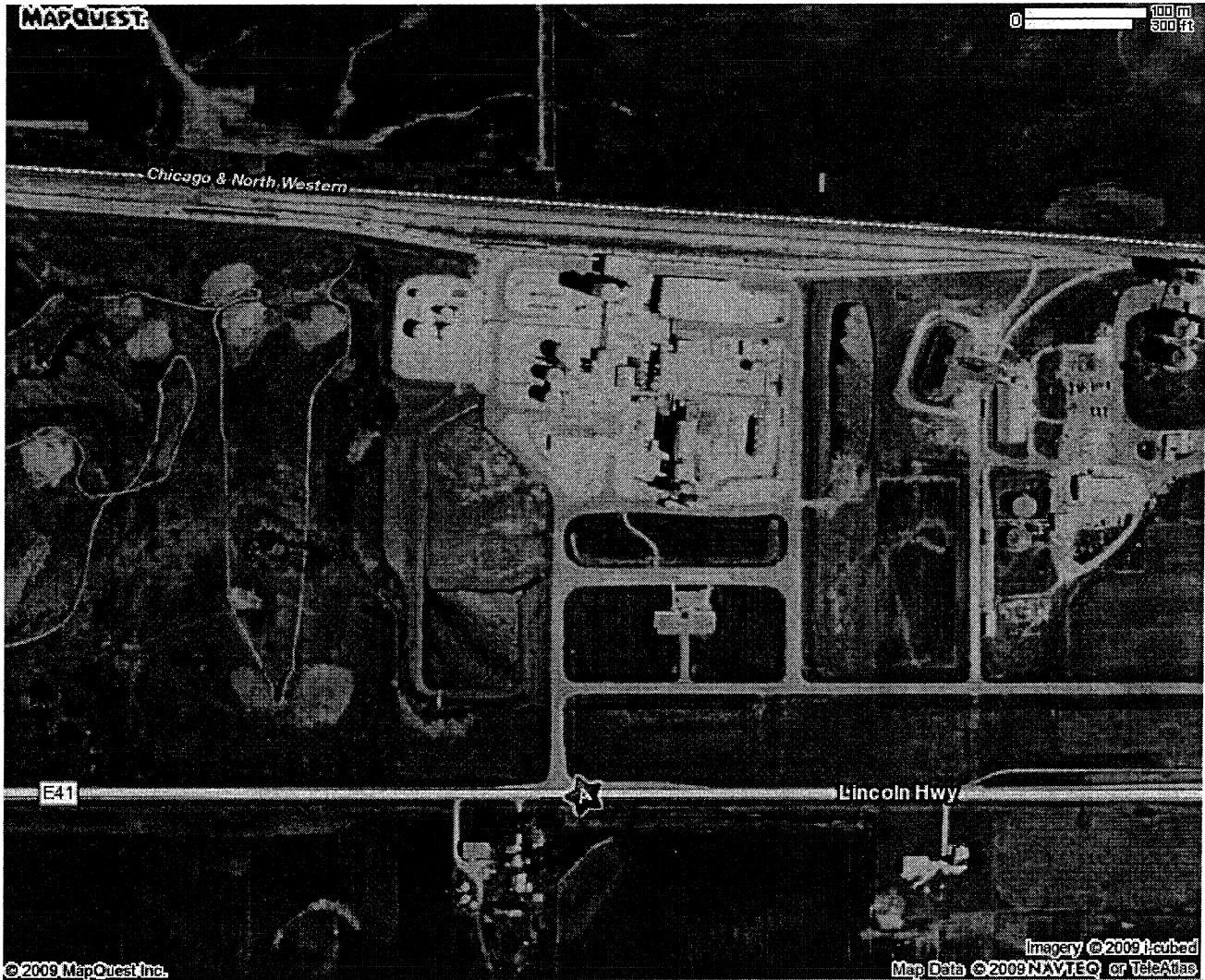




MAPQUEST.

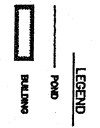
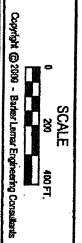
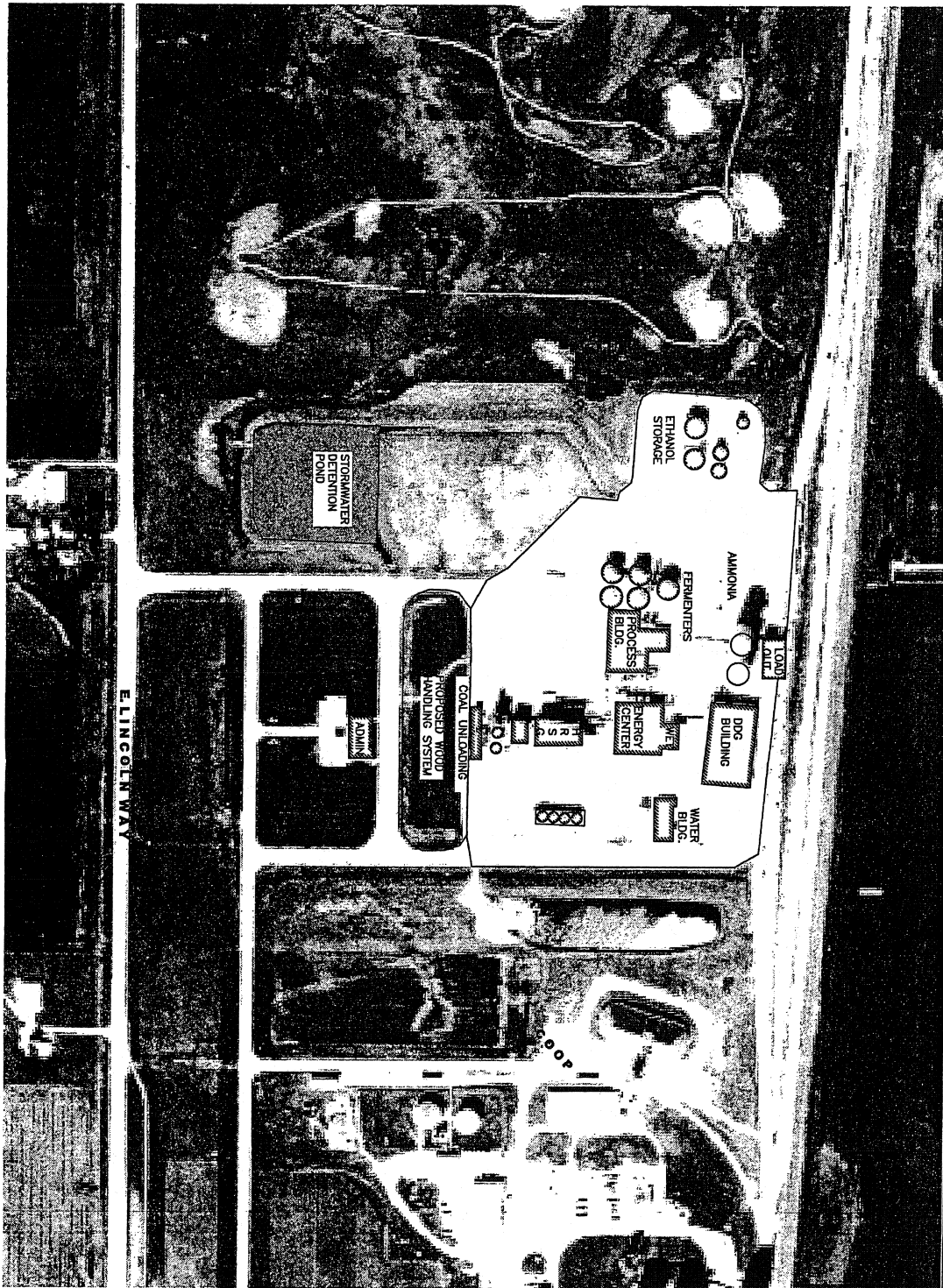
Sorry! When printing directly from the browser your directions or map may not print correctly. For best results, try clicking the Printer-Friendly button.

★ **59511 Lincoln Hwy**
Nevada, IA 50201-7992



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BARKER LEMAR
 ENGINEERING CONSULTANTS
 4141 Lincoln Ave. - Lincoln, Iowa, 51805
 Phone: 618.256.1841 Fax: 618.256.1815 www.barkerlemar.com

SHEET
 1

SITE MAP

LINCOLN WAY ENERGY, LLC
 NEVADA, IOWA
 PROJECT NO. LINEN 09001
 DRAWING DATE: OCTOBER 2009

| REVISION | DATE | DESCRIPTION |
|----------|------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |

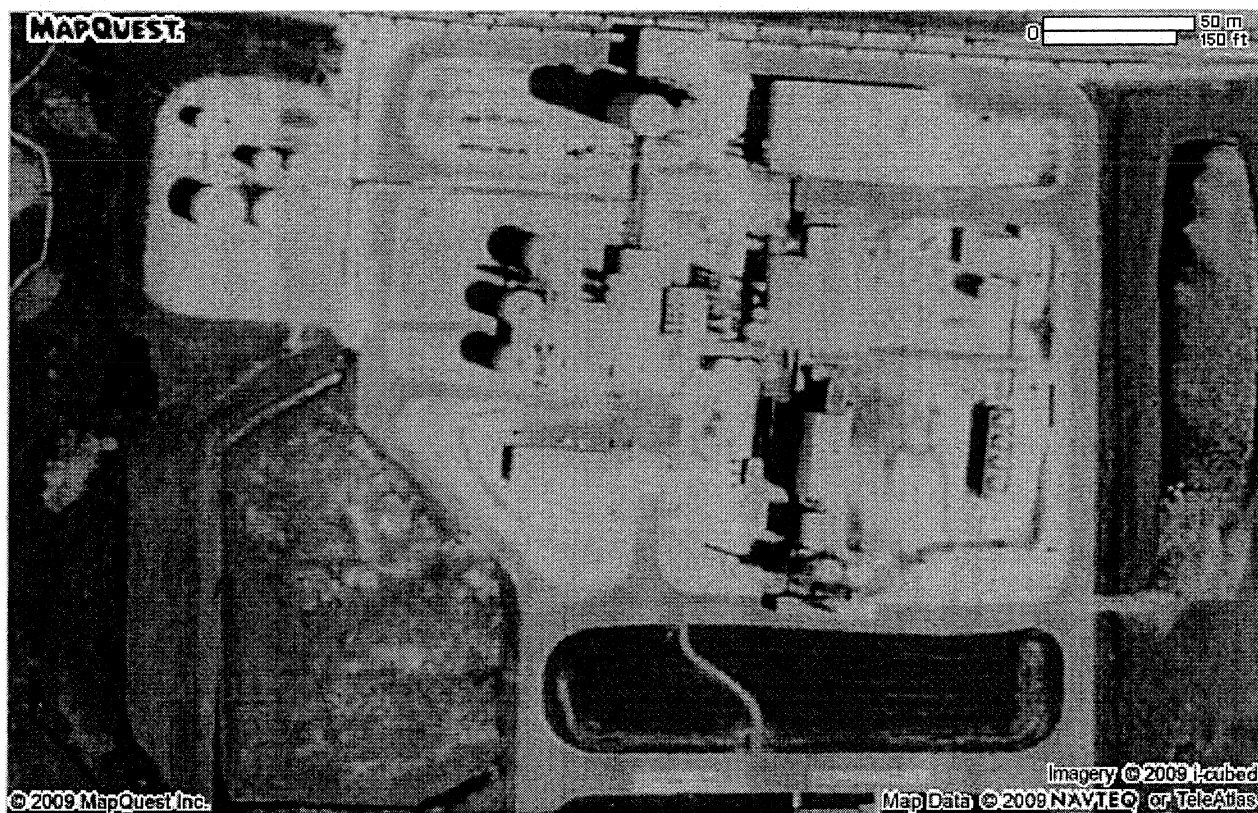




MAPQUEST.

Map of 59511 Lincoln Hwy
Nevada, IA 50201-7992

Notes

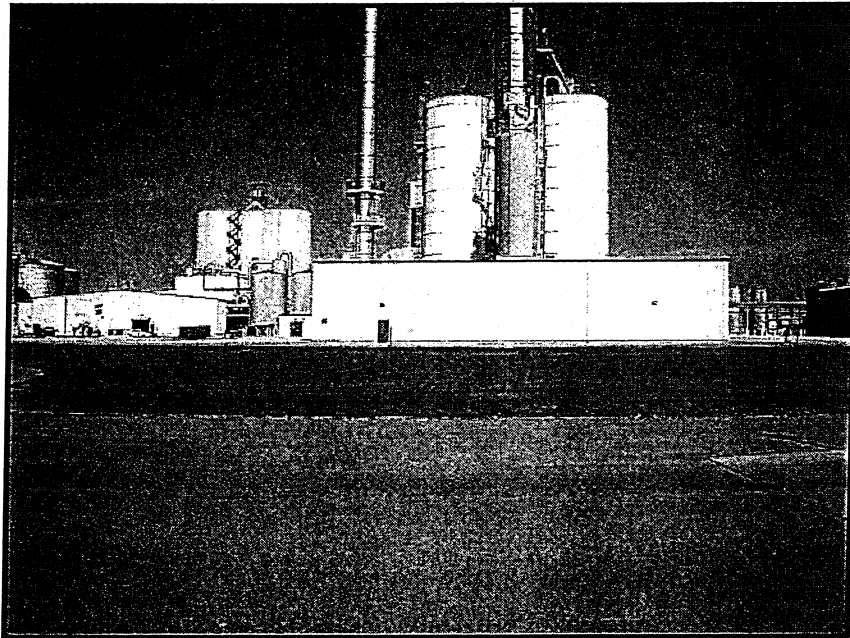


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Picture 1. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is northerly toward coal unloading area.



Picture 2. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is to the north showing turf field and existing paved surface.

PHOTO DOCUMENTATION
LINCOLNWAY ENERGY, LLC
NEVADA, IOWA
PROJECT NO. LINEN 09001

BARKERLEMAR
ENGINEERING CONSULTANTS

FIGURE
1



NACD Query Results

Full Data Report

Query input:

State = Iowa
County = Story

The following 3 records for Federally recognized Indian tribe(s), Native Hawaiian organization(s), Alaska Native corporation(s), and/or their designated NAGPRA contact(s) have been identified:

- Sac & Fox Nation of Missouri in Kansas and Nebraska
- Sac & Fox Nation, Oklahoma
- Sac & Fox Tribe of the Mississippi in Iowa

The following 2 related records have been identified:

- Sac & Fox Tribe of Indians of Oklahoma
- Sac & Fox Tribe of Missouri

There are 5 total records

FULL DATA REPORT

Sac & Fox Nation of Missouri in Kansas and Nebraska

FEDERALLY APPROVED NAGPRA ENTITY: **Yes**

ENTITY TYPE(S):

- Federally Recognized Indian Tribe

AUTHORITY:

- BIA Recognized Indian Entities, Federal Register, Nov. 25, 2005

LAST UPDATE TO INFORMATION: 12/20/2005

Contact(s)

Ms. Sandra Keo
Sac and Fox Nation of Missouri
305 N. Main St.
Reserve, KS 66434
785-742-7471
785-742-3785 FAX

Authority

BIA Tribal Leaders Directory,
Spring/Summer 2005

Chairperson

Contact(s)

Mr. Edmore Green
Sac and Fox Nation of Missouri
Rural Route 1, Box 60
Reserve, KS 66434-9723
785-742-7471
785-742-2979

Authority

Letter From Tribal Official

NAGPRA Contact

Contact(s)

Mr. Russell Gilfillan
Sac and Fox Nation of Missouri
Rural Route 1, Box 60
Reserve, KS 66434-9723
785-742-7471
785-742-2979

Authority

Letter From Tribal Official

NAGPRA Contact

Contact(s)

Deanne Bahr
Sac and Fox Nation of Missouri
Rural Route 1, Box 60
Reserve, KS 66434-9723
785-742-7471
785-742-2979

Authority

Letter From Tribal Official

NAGPRA Contact

RELATED TRIBES/VILLAGES

Used For Sac & Fox (Also Known As)

Used For Sac & Fox Tribe of Missouri (Also Known As; Plaintiff in Land Claims Case)

Used For Sac & Fox Nation (Also Known As)

Used For Sac & Fox [generic] (Also Known As)

RESERVATION NAME(S)

| <u>State</u> | <u>County</u> | <u>Reservation Name</u> |
|--------------|---------------|-------------------------------------|
| KS | Brown | Sac & Fox Indian Reservation, KS/NE |
| NE | Richardson | |

STATE(S) AND COUNTY(IES) INHABITED

| <u>State</u> | <u>County</u> |
|--------------|---------------|
|--------------|---------------|

LAND AREA CLAIMS

| <u>St</u> | <u>County</u> | <u>Land Claim Authority</u> | <u>Map ID</u> |
|-----------|---------------|-----------------------------------|-------------------------|
| IA | Clayton | Indian Claims Commission decision | Land Claims Map ID # 55 |
| IA | Clinton | | |
| IA | Dubuque | | |
| IA | Jackson | | |
| IL | Adams | | |
| IL | Bureau | | |
| IL | Carroll | | |
| IL | Henry | | |
| IL | Jo Daviess | | |
| IL | Mercer | | |
| IL | Pike | | |
| IL | Rock Island | | |
| IL | Stephenson | | |
| IL | Whiteside | | |
| MO | Audrain | | |
| MO | Callaway | | |
| MO | Lincoln | | |
| MO | Marion | | |
| MO | Monroe | | |
| MO | Montgomery | | |
| MO | Pike | | |
| MO | Ralls | | |
| MO | Shelby | | |
| MO | Warren | | |
| WI | Crawford | | |
| WI | Grant | | |

NE Richardson
 NE Sarpy
 NE Thurston
 NE Washington
 SD Union

IDENTIFIED BY TRIBE AS BEING OF PARTICULAR INTEREST

Not provided

FULL DATA REPORT

Sac & Fox Nation, Oklahoma

FEDERALLY APPROVED NAGPRA ENTITY: **Yes**

ENTITY TYPE(S):

- Federally Recognized Indian Tribe

AUTHORITY:

- BIA Recognized Indian Entities, Federal Register, Nov. 25, 2005

LAST UPDATE TO INFORMATION: 12/20/2005

=====

Contact(s)

Authority

Ms. Sandra Kaye Massey
 Sac and Fox Nation of Oklahoma
 Route 2, Box 246
 Stroud, OK 74079
 918-352-3526
 800-259-3970
 wanhest@yahoo.com

NAGPRA Contact

Letter From Tribal Official

Contact(s)

Authority

Ms. Kay Rhoads
 Sac and Fox Nation of Oklahoma
 Route 2, Box 246
 Stroud, OK 74079
 918-968-3526
 918-968-4837 fax

Principal Chief

BIA Tribal Leaders Directory,
 Spring/Summer 2005

RELATED TRIBES/VILLAGES

- Used For Sac & Fox (Also Known As)
- Used For Sac & Fox Tribe of Indians of Oklahoma (Also Known As; Plaintiff in Land Claims Case)
- Used For Sac & Fox Nation (Also Known As)
- Used For Sac & Fox [generic] (Also Known As)

RESERVATION NAME(S)

| <u>State</u> | <u>County</u> | <u>Reservation Name</u> |
|--------------|---------------|-------------------------|
|--------------|---------------|-------------------------|

STATE(S) AND COUNTY(IES) INHABITED

| <u>State</u> | <u>County</u> |
|--------------|---------------|
| OK | Lincoln |

LAND AREA CLAIMS

| <u>St</u> | <u>County</u> | <u>Land Claim Authority</u> | <u>Map ID</u> |
|-----------|---------------|-----------------------------------|-------------------------|
| IA | Clayton | Indian Claims Commission decision | Land Claims Map ID # 55 |
| IA | Clinton | | |
| IA | Dubuque | | |
| IA | Jackson | | |
| IL | Adams | | |
| IL | Bureau | | |
| IL | Carroll | | |
| IL | Henry | | |
| IL | Jo Daviess | | |
| IL | Mercer | | |
| IL | Pike | | |
| IL | Rock Island | | |
| IL | Stephenson | | |
| IL | Whiteside | | |
| MO | Audrain | | |
| MO | Callaway | | |
| MO | Lincoln | | |
| MO | Marion | | |
| MO | Monroe | | |
| MO | Montgomery | | |
| MO | Pike | | |
| MO | Ralls | | |
| MO | Shelby | | |
| MO | Warren | | |
| WI | Crawford | | |

NE Otoe
NE Richardson
NE Sarpy
NE Thurston
NE Washington
SD Union

IDENTIFIED BY TRIBE AS BEING OF PARTICULAR INTEREST
Not provided

FULL DATA REPORT

Sac & Fox Tribe of the Mississippi in Iowa

FEDERALLY APPROVED NAGPRA ENTITY: **Yes**

ENTITY TYPE(S):

- Federally Recognized Indian Tribe
- Plaintiff in Land Claims Case

AUTHORITY:

- BIA Recognized Indian Entities, Federal Register, Nov. 25, 2005
- Indian Claims Commission

LAST UPDATE TO INFORMATION: 12/20/2005

=====

Contact(s)

Mr. Homer Bear , Jr.
Sac and Fox Tribe of the Mississippi
in Iowa
349 Meskwaki Rd.
Tama, IA 52339-9629
641-484-4678
641-484-5424 fax

Authority

BIA Tribal Leaders Directory,
Spring/Summer 2005

Contact(s)

Mr. Johnathan Buffalo
Sac and Fox Tribe of the Mississippi
in IA
349 Meskwaki Road
Tama, IA 52339-9629

Authority

641-484-4678
 641-484-4321 FAX
 jbuffalo@iavalley.cc.ia.us
 NAGPRA Contact

Letter From Tribal Official

=====

RELATED TRIBES/VILLAGES

Used For Sac & Fox (Also Known As)
 Used For Sac & Fox Nation (Also Known As)
 Used For Meskwaki (Also Known As)
 Used For Sac & Fox [generic] (Also Known As)

RESERVATION NAME(S)

| <u>State</u> | <u>County</u> | <u>Reservation Name</u> |
|--------------|---------------|-----------------------------|
| IA | Tama | Tama (Sac & Fox) Settlement |

STATE(S) AND COUNTY(IES) INHABITED

| <u>State</u> | <u>County</u> |
|--------------|---------------|
|--------------|---------------|

LAND AREA CLAIMS

| <u>St</u> | <u>County</u> | <u>Land Claim Authority</u> | <u>Map ID</u> |
|-----------|---------------|-----------------------------------|-------------------------|
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| IA | Dubuque | | |
| IA | Jackson | | |
| IL | Adams | | |
| IL | Bureau | | |
| IL | Carroll | | |
| IL | Henry | | |
| IL | Jo Daviess | | |
| IL | Mercer | | |
| IL | Pike | | |
| IL | Rock Island | | |
| IL | Stephenson | | |
| IL | Whiteside | | |
| MO | Audrain | | |
| MO | Callaway | | |
| MO | Lincoln | | |
| MO | Marion | | |
| MO | Monroe | | |
| MO | Montgomery | | |

MO Worth
 NE Burt
 NE Dakota
 NE Douglas
 NE Nemaha
 NE Otoe
 NE Richardson
 NE Sarpy
 NE Thurston
 NE Washington
 SD Union

IDENTIFIED BY TRIBE AS BEING OF PARTICULAR INTEREST

Not provided

FULL DATA REPORT

Sac & Fox Tribe of Indians of Oklahoma

FEDERALLY APPROVED NAGPRA ENTITY: No

ENTITY TYPE(S):

- Also Known As
- Plaintiff in Land Claims Case

AUTHORITY:

- Indian Claims Commission

LAST UPDATE TO INFORMATION: 03/01/1996

=====

=====

RELATED TRIBES/VILLAGES

Use Sac & Fox Nation, Oklahoma (Federally Recognized Indian Tribe)

RESERVATION NAME(S)

| <u>State</u> | <u>County</u> | <u>Reservation Name</u> |
|--------------|---------------|-------------------------|
|--------------|---------------|-------------------------|

STATE(S) AND COUNTY(IES) INHABITED

| <u>State</u> | <u>County</u> |
|--------------|---------------|
|--------------|---------------|

LAND AREA CLAIMS

| <u>St</u> | <u>County</u> | <u>Land Claim Authority</u> | <u>Map ID</u> |
|-----------|---------------|-----------------------------------|-------------------------|
| IA | Clayton | Indian Claims Commission decision | Land Claims Map ID # 55 |
| IA | Clinton | | |

IA Union
IA Webster
IA Woodbury
KS Atchison
KS Doniphan
KS Leavenworth
KS Wyandotte
MO Andrew
MO Atchison
MO Buchanan
MO Clay
MO Clinton
MO De Kalb
MO Gentry
MO Holt
MO Nodaway
MO Platte
MO Worth
NE Burt
NE Dakota
NE Douglas
NE Nemaha
NE Otoe
NE Richardson
NE Sarpy
NE Thurston
NE Washington
SD Union

IDENTIFIED BY TRIBE AS BEING OF PARTICULAR INTEREST

Not provided

FULL DATA REPORT**Sac & Fox Tribe of Missouri**

FEDERALLY APPROVED NAGPRA ENTITY: No

ENTITY TYPE(S):

- Also Known As
- Plaintiff in Land Claims Case

AUTHORITY:

- Indian Claims Commission

LAST UPDATE TO INFORMATION: 03/01/1996

=====

=====

RELATED TRIBES/VILLAGES

Use Sac & Fox Nation of Missouri in Kansas and Nebraska (Federally Recognized Indian Tribe)

RESERVATION NAME(S)

| <u>State</u> | <u>County</u> | <u>Reservation Name</u> |
|--------------|---------------|-------------------------|
|--------------|---------------|-------------------------|

STATE(S) AND COUNTY(IES) INHABITED

| <u>State</u> | <u>County</u> |
|--------------|---------------|
|--------------|---------------|

LAND AREA CLAIMS

| <u>St</u> | <u>County</u> | <u>Land Claim Authority</u> | <u>Map ID</u> |
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| IL | Carroll | | |
| IL | Henry | | |
| IL | Jo Daviess | | |
| IL | Mercer | | |
| IL | Pike | | |
| IL | Rock Island | | |
| IL | Stephenson | | |
| IL | Whiteside | | |
| MO | Audrain | | |
| MO | Callaway | | |
| MO | Lincoln | | |
| MO | Marion | | |
| MO | Monroe | | |
| MO | Montgomery | | |
| MO | Pike | | |
| MO | Ralls | | |
| MO | Shelby | | |
| MO | Warren | | |
| WI | Crawford | | |
| WI | Grant | | |

REQUEST FOR ENVIRONMENTAL INFORMATION

| | |
|-----------------|------------------------|
| Name of Project | Lincolnway Energy, LLC |
| Location | Nevada, Iowa |

- Item 1a.** Has a Federal, State, or Local Environmental Impact Statement or Analysis been prepared for this project?
 Yes No Copy attached as EXHIBIT I-A.
- 1b.** If "No." provide the information requested in Instructions as EXHIBIT I.
- Item 2.** The State Historic Preservation Officer (SHPO) has been provided a detailed project description and has been requested to submit comments to the appropriate Rural Development Office. Yes No Date description submitted to SHPO _____
- Item 3.** Are any of the following land uses or environmental resources either to be affected by the proposal or located within or adjacent to the project site(s)? (Check appropriate box for every item of the following checklist).

| | Yes | No | Unknown | | Yes | No | Unknown |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---|-------------------------------------|-------------------------------------|--------------------------|
| 1. Industrial..... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 19. Dunes..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Commercial..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 20. Estuary..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Residential..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. Wetlands..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Agricultural..... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 22. Floodplain..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Grazing..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 23. Wilderness..... (designated or proposed under the Wilderness Act) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Mining, Quarrying..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24. Wild or Scenic River..... (proposed or designated under the Wild and Scenic Rivers Act) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Forests..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 25. Historical, Archeological Sites..... (Listed on the National Register of Historic Places or which may be eligible for listing) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. Recreational..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26. Critical Habitats..... (endangered/threatened species) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9. Transportation..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 27. Wildlife..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10. Parks..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 28. Air Quality..... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Hospital..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 29. Solid Waste Management..... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Schools..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 30. Energy Supplies..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 13. Open spaces..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31. Natural Landmark..... (Listed on National Registry of Natural Landmarks) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 14. Aquifer Recharge Area..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 32. Coastal Barrier Resources System..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15. Steep Slopes..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | |
| 16. Wildlife Refuge..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | |
| 17. Shoreline..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | |
| 18. Beaches..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | |

Item 4. Are any facilities under your ownership, lease, or supervision to be utilized in the accomplishment of this project, either listed or under consideration for listing on the Environmental Protection Agency's List of Violating Facilities? Yes No

10-29-2009

(Date)

Signed:

Richard J. Buehn
(Applicant)

President and Chief Executive Officer

(Title)



Lincolnway Energy, LLC

Creating Energy for Iowa & America

Lincolnway Energy is in the final stages of negotiating a settlement on an alleged air emissions violation with the Iowa Department of Natural Resources. The emissions violation stems from plant design calculations that were made based on pilot testing and proved to be inaccurate. The pilot test, conducted prior to plant design, was not truly representative of actual air emissions thus causing Lincolnway Energy to apply for and receive an Air Quality Permit that did not allow for the correct amount of particulate emissions.

Lincolnway Energy has been in negotiations with the Iowa Department of Natural Resources since May 2009 and plans to reach agreement and receive a new Air Quality Permit within the next sixty days. Once the new permit Air Quality Permit is issued Lincolnway Energy plans be in full compliance with all permits no later January 1, 2010

Completion of this project would help further reduce particulate emissions to a level below the pending Air Quality Permit limits. Switching to biomass would not only reduce particulate emissions but would reduce emissions of hazardous compounds contained in coal but not contained in biomass.

Regards,

Richard Brehm
President and Chief Executive Officer

Environmental Assessment Worksheet

For

***Lincolnway Energy, LLC
(Nevada, IA – Story County)***

USDA Rural Development

POLICY

It is the policy of USDA Rural Development and the Iowa Department of Economic Development not to approve or fund any applicant proposals that, as a result of their identifiable impacts, direct or indirect, would lead to or accommodate the irreconcilable impact on the assessment categories listed in this document. The only exception to this policy is if the approving official determines that there is no reasonable alternative to the proposal, the proposal conforms to the planning criteria, and the proposal includes all practicable measures for reducing the impact in accordance to the corresponding federal regulation.

ORGANIZING THE REPORT

Page 1: Create a coversheet that includes the project name, location (i.e. city & county)

Page 2: This page

Page 3: Table of Contents

Page 4: Answer Sections I, II and III in narrative form. Do not include these questions in the EA.

Remaining Pages: Complete Section IV using this document or create your own following this format. All items with a (bullet •, italicized, and/or in BLUE PRINT) do not need to be copied into the final EA document.

INSTRUCTIONS FOR COMPLETING THE ASSESSMENT FOR THE CRITERIA IN THE FOLLOWING PAGES:

In completing this assessment, it is important to understand the comprehensive nature of the impacts which must be analyzed. Consideration must be given to all potential impacts associated with the construction of the proposal, its operation and maintenance, the operation of all primary beneficiaries, and the attainment of the proposal's major objectives.

The attainment of the proposal's major objectives often induces or supports changes in population densities, land uses, community services, transportation systems and resource consumption. The scope of the assessment is broadened even further when there are related activities involved. The impacts of these activities must also be assessed.

The preparer will consult with appropriate experts from Federal, state, and local agencies, and other organizations or groups whose views could be helpful in the assessment of potential impacts. All related correspondence must be attached to the assessment, including; Form RD 1940-20, "Request for Environmental Information".

The amount of analysis and detail provided must be commensurate with the magnitude of the expected impact. The analysis of each environmental factor (i.e., water quality, air quality, etc.) must be taken to the point that a conclusion can be reached and supported concerning the degree of the expected impact with respect to that factor.

- Assessment Questions: These will lead you to the rating. Not all questions apply to each type of proposal, if the question is not applicable answer with N/A.
- Informational Sheets, Forms & Notices: These can be found at the back of this assessment in their respective sections. Attach those that apply to your completed assessment.

- Source information: For each assessment criteria please list the informational source, which could be a person or where this information can be obtained. Also, create an appendix section for each criterion for the supporting documentation.
- Mitigation: If mitigation is required describe the proposed mitigation measures in the space provided under each criterion. Mitigation measure must be practicable and enforceable.
- Effects or impacts: (As used in this text are synonymous) Analyze each environmental resource and discuss the environmental effects or impacts including the consequences. All direct, indirect and cumulative effects or impacts need to be identified and discussed.

Direct effects are caused by the proposal and occur at the same time and place (e.g. construction activities).

Indirect effects are those caused by the action and are later in time or further removed in distance, but still reasonably foreseeable (e.g. impacts caused by growth induced by the proposal).

Cumulative effects result from the incremental impact of the proposal when added to other past, present, and future actions regardless of who undertakes such other actions (e.g. effects of the interaction of this proposed proposal with other past, present, and future activities in the area).

- Rating: Evaluate the proposal using the following rating system in terms of actual or potential impacts on the **environment**.

0 = No Impact Anticipated

1 = Potentially Beneficial Impact

2 = Minimal Adverse Impacts: impacts which can be easily mitigated with minimal expense or delay in the proposals implementation

3 = Less Than Significant Adverse Impacts: impacts which can be mitigated through use of special measures which may add extra costs to the proposal or result in a short delay of the proposals implementation

4 = Significant Adverse Impacts: impacts which cannot be mitigated or which would require extensive mitigation techniques which would be very costly and/or which would result in long delays in the proposals implementation.

N/P = Resource Not Present: after investigation.

Table of Contents

| | | |
|--------|---|----|
| I. | Project Description Purpose and Need | 9 |
| II. | Primary Beneficiaries and Related Activities | 14 |
| III. | Description of the Project Area | 14 |
| IV. | Environmental Impacts Resource Criteria | 15 |
| | 1. Air Quality | 15 |
| | 2. Surface Water, Water Supply Quality, Groundwater, Storm Water, and Waste, Water | 23 |
| | 3. Solid Waste Management and Hazardous Waste Management | 30 |
| | 4. General Land Use | 32 |
| | 5. Transportation | 35 |
| | 6. Natural Environment | 38 |
| | 7. Human Population Socio-Economic/Environmental Justice | 39 |
| | 8. Construction | 41 |
| | 9. Energy | 42 |
| | 10. Miscellaneous | 43 |
| V. | Coastal Zone Management Areas | 45 |
| VI. | Cultural Resources, Historical, Archaeological | 45 |
| VII. | Wild and Scenic Rivers | 46 |
| VIII. | Biological Resources Critical Habitat and Endangered /Threatened Species Act | 47 |
| IX. | Important Farmland | 48 |
| X. | Floodplain Management and Wetlands Management | 49 |
| XI. | Coastal Barrier Resources System | 50 |
| XII. | State Environmental Policy Act | 50 |
| XIII. | Intergovernmental Review | 50 |
| XIV. | Environmental Analysis Of Participating Federal Agency | 51 |
| XV. | Reaction To Project | 51 |
| XVI. | Cumulative Impacts | 51 |
| XVII. | Adverse Impacts | 52 |
| XVIII. | Alternatives, Including the Proposed Action | 53 |

| | | |
|------------|---|----|
| XIX. | Mitigation | 53 |
| XX. | Consistency with Rural Development Environmental Policies | 54 |
| Appendix A | Map of Project Site | |
| Appendix B | Surrounding Area Maps, Site Photos | |
| Appendix C | Permits | |
| Appendix D | Impaired Waterways, Watershed Plan | |
| Appendix E | Water Supply Quality Documentation | |
| Appendix F | Storm Water Permit | |
| Appendix G | Waste Water Documentation | |
| Appendix H | Hazardous Waste Generators & Handlers Map | |
| Appendix I | Map of Parks and Wilderness Areas | |
| Appendix J | Civil Rights Impact Analysis Form | |
| Appendix K | Section 106 Process | |
| Appendix L | Endangered Species | |
| Appendix M | Floodplain Form | |
| Appendix N | National Wetlands Inventory Map, Story County Hydric Soils List | |

I. PROJECT DESCRIPTION: PURPOSE AND NEED

Purpose for Request

Lincolnway Energy is requesting financial assistance from Rural Development to purchase and install material handling infrastructure required for biofuels that will replace coal. The installation of the material handling infrastructure designed for biofuels will be installed at the existing Lincolnway Ethanol Plant in Story County Iowa (59511 West Lincolnway Highway, Nevada, IA 50201) with construction beginning in 2010.

Additionally, Lincolnway Energy is requesting financial assistance to develop both material specifications/educational materials for potential suppliers and on-site laboratory protocols specific to contamination potentially mixed with biofuel supplies.

Current Production

Currently, the Lincolnway Energy ethanol plant manufactures approximately 55 million gallons of ethanol and approximately 6.5 million pounds of corn oil per year. Additionally, approximately 135,000 tons of dried distiller's grain is sold per year. This annual production requires 300 tons of coal per day to meet its energy requirements. Coal is shipped by truck from Williams, Iowa approximately 40 miles away.

Equipment and Related Components

The conversion to biofuel combustion from coal will not require any specific changes to the existing boiler infrastructure. The primary equipment changes involve a separate storage/feed/delivery system. Specifically, the conversion to a biofuel(s) will require a storage building/ load out building, wheel loader, screeners, silos, metering bins, and pneumatic blowers. The proposed biofuels storage building is designed to keep loads of biofuel dry and separate until testing and QA/QC work is complete on each load.

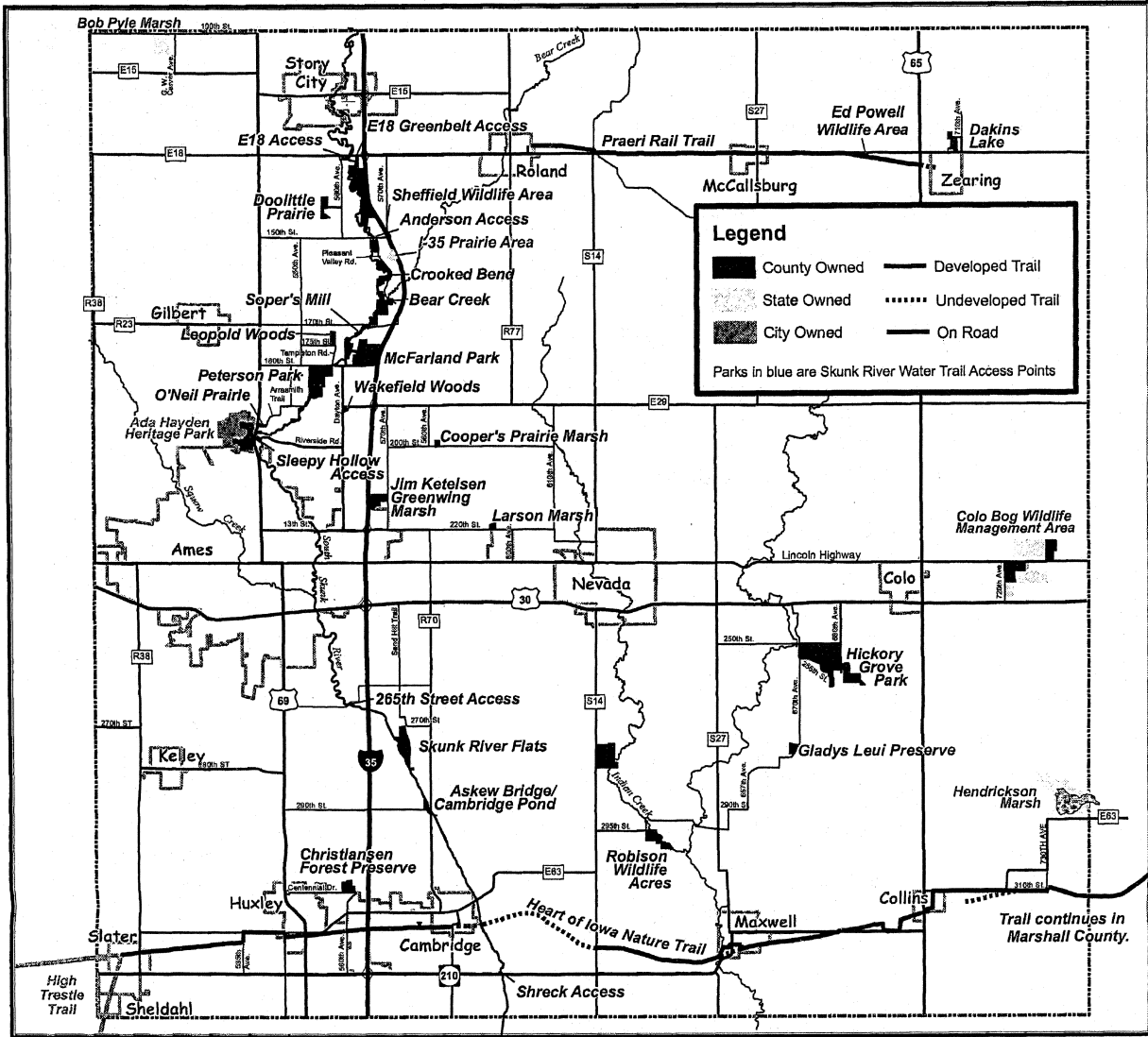
Beyond equipment, the development of a unique supply-side infrastructure for mixed-source biofuels requires testing, permitting, and education. All of the new biomass components (equipment, permitting, testing, supplier education) are required for mixed-source biofuel applications to be in compliance with state and federal rules as well as to be environmentally and financially sustainable.

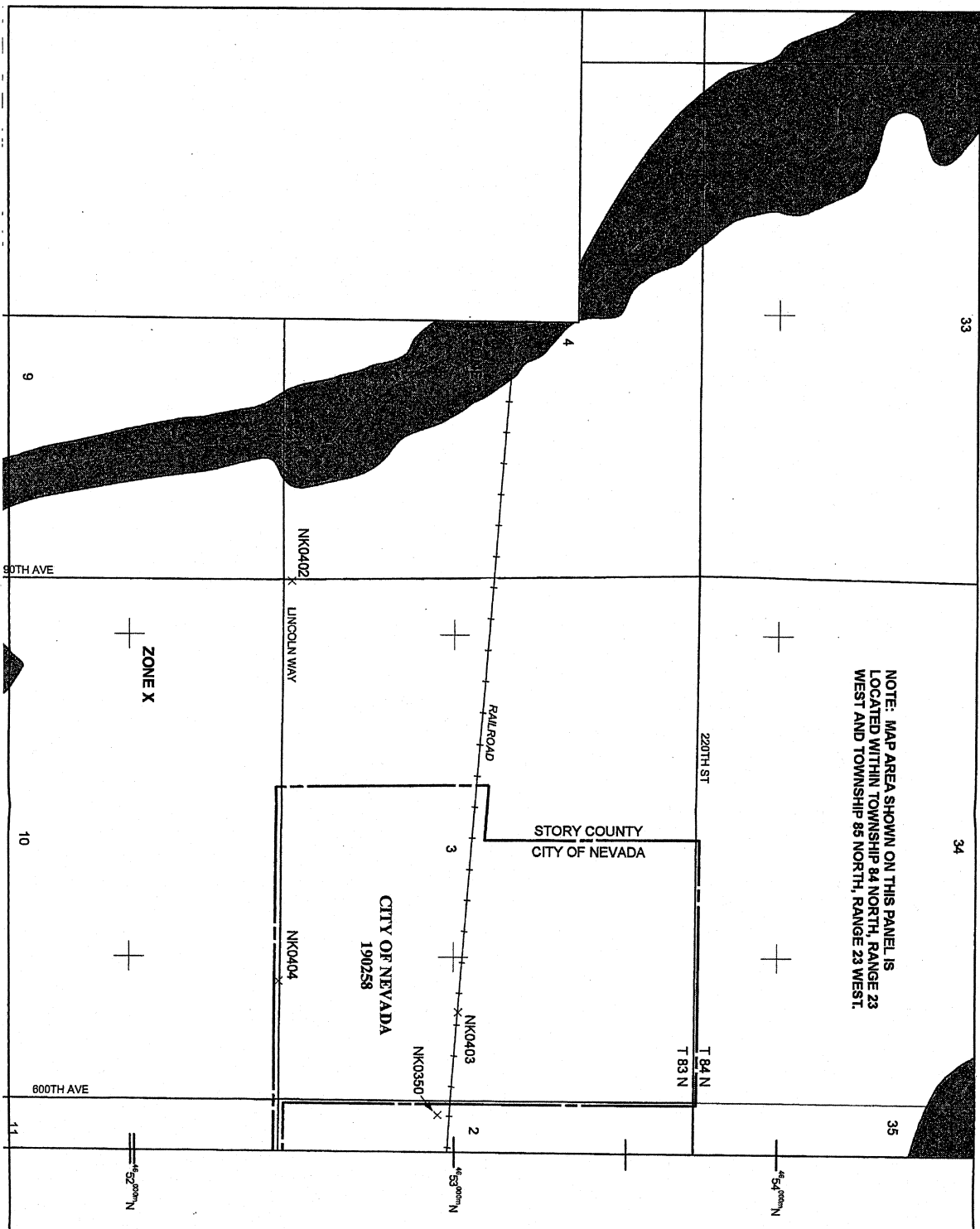
Timeline and Cost

Lincolnway Energy is developing plans, specifications, and related documents for groundbreaking of the biomass portion of the facility in the spring/summer of 2010. The budget for this entire project is approximately \$4.42 million. The primary financial partners are Lincolnway Energy and the financial institutions with whom they use for professional services; including (CoBank in Omaha). Lincolnway Energy is requesting \$1.95 million to assist in the development of a biofuels infrastructure in Iowa spurring America's energy independence.

Diversion from Coal and Emission Reductions

The conversion from coal to biofuels is expected to significantly reduce the use of a non-renewable energy sources and significantly reduce sulfur emissions, carbon dioxide, and other air emissions. Lincolnway Energy will initially divert approximately 25,000 tons





NOTE: MAP AREA SHOWN ON THIS PANEL IS
 LOCATED WITHIN TOWNSHIP 84 NORTH, RANGE 23
 WEST AND TOWNSHIP 85 NORTH, RANGE 23 WEST.

Finance Program at 1-800-638-6620.



MAP SCALE 1" = 1000'
 500 0 1000 2000

NFP
 PANEL 0170E

FIRM
 FLOOD INSURANCE RATE MAP
 STORY COUNTY,
 IOWA
 AND INCORPORATED AREAS

PANEL 170 OF 500
 (SEE MAP INDEX FOR PANEL LAYOUT)

| CONTRACT NO. | NUMBER | DATE | SUBJECT |
|--------------|--------------|-------------------|---------|
| 191693C/170E | 191693C/170E | FEBRUARY 20, 2008 | |

MAP NUMBER
 191693C/170E
EFFECTIVE DATE
 FEBRUARY 20, 2008

NATIONAL FLOOD INSURANCE PROGRAM



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using FIRM Online. This map does not reflect changes or amendments which may have been made subsequent to the date on the map. For the most current information, please visit the FEMA Flood Map Service Center website at www.fema.gov.

annually of coal with a goal of diverting 100,000 tons of coal annually using biomass (specifically cellulosic based fuels such as wood). Powder River Basin (PRB) coal produced in Wyoming generates approximately 200 pounds of carbon dioxide per million Btu. Lincolnway's conversion to solid biofuels as an energy source is expected to reduce atmospheric emissions of carbon dioxide emissions by 100% when the plant is operating on 100% biofuel. Biofuels contain "biogenic" carbon. Under international greenhouse gas accounting methods developed by the Intergovernmental Panel on Climate Change, biogenic carbon is part of the natural carbon balance and it will not add to atmospheric concentrations of carbon dioxide.

Regarding sulfur emissions, PRB coal requires Lincolnway Energy to add limestone for sulfur scrubbing. The use of biofuels by Lincolnway Energy is expected to reduce the added expense of sulfur emission reduction infrastructure. Lincolnway's conversion of biofuels (wood) is expected to reduce annual sulfur dioxide emissions by 70% or more (wood is essentially a low-sulfur fuel generating 30 times less SO_x). Combustion of wood at Lincolnway Energy could generate 30% less particulates, 20% less Carbon monoxide, and 60% less hydrochloric acid (HCL) and hydrogen fluoride (HF).

Biofuels will likely increase NO_x emissions generating a net increase in emissions 10-20%. The combustion of coal requires Lincolnway Energy to add anhydrous ammonia to reduce oxides of nitrogen (NO_x). The increased NO_x emissions would likely require increased use of anhydrous ammonia. Specific emission reductions will depend, in part, on the mix of biofuels received.

Location and Process (Equipment)

The manufacture of ethanol from biofuels, specifically from mixed-sources, is a unique application in the United States. Energy Products of Idaho (EPI) the manufacturer of Lincolnway Energy's fluidized bed and ancillary systems (including the refractory-lined furnace, combustion air supply/distribution system, fuel metering/feed system, and pneumatic fuel conveyance system) is an expert in biofuel combustion technology. EPI has installed over 90 biomass and coal-fired fluidized bed combustion systems worldwide.

The Site Map located in Appendix A shows the location of the proposed biomass system to be constructed at Lincolnway Energy's Nevada, Iowa facility. The biomass system will be located north of the administration building on an area that is currently grass/turf. Pictures located in Appendix B show the general area in which the biomass system will be constructed. No additional property will be purchased by Lincolnway Energy to develop/construct the biomass system.

In general, material will be received at the scale and then dumped indoors where it can be checked for quality and contamination. Material will then be moved by end-loader to a grizzly screen built into the receiving floor, where material will be screened and moved by a conveyor to a disk screener. A bucket elevator will be used to unload the material from the disk screener and move the feedstock to fuel storage bins. The fuel storage bins will be emptied by a feed conveyor that fills metering bins. The biomass is moved from the metering bins via high pressure blowers to the furnace.

Purpose and Need for this Project

There is a need for this application as determined by the Federal Government. The purpose of the USDA-9004 grant is to provide financial incentives to biorefineries in existence on June 18, 2008, to replace the use of fossil fuels used to produce heat or power at their facilities by installing new systems that use renewable biomass, or to produce new energy from renewable biomass.

On May 5, 2009, the President issued a Presidential Directive to Secretary of Agriculture Thomas R. Vilsack to aggressively accelerate the investment in and production of biofuels (published in the **Federal Register** on May 7, 2009 (74 FR 21531–21532)). Secretary Vilsack also announced that he will help lead an unprecedented interagency effort to increase America's energy independence and spur rural economic development.

The Presidential directive requests that Secretary Vilsack take steps to the extent permitted by law to expedite and increase production of and investment in biofuel development efforts by, among other things, making renewable energy financing opportunities from the 2008 Farm Bill available within 30 days, which includes guidance and support to encourage biorefineries to replace the use of fossil fuels in plant operations by installing new biomass energy systems or producing new energy from renewable biomass.

Lincolnway Energy is expecting to purchase and use biofuels for 33% of its energy needs initially (100 tons per day). Use of biofuels will increase up to 400 tons per day or 100% biofuel use (300 tons of coal has approximately the same Btu value as 400 tons of wood waste). This specific project meets the goals of the Presidential directive to USDA by promoting the development of an environmentally sound biofuel industry in Iowa by consuming from 100 to 400 tons per day of cellulosic-based biofuel.

This project will meet the goals of the Presidential directive by enhancing both the economic and environmental viability of bio-fuel use in Iowa. Regarding the economics of using biofuels from mixed-sources, Lincolnway Energy is looking to replace a substantial amount of non-renewable resource, specifically Powder River Basin (PRB) coal with wood and cellulosic-based wastes. Coal prices are expected to continue to escalate as coal reserves require additional overburden be removed prior to extraction. PRB coal is currently sold for approximately \$13.50 per ton; freight charges to Nevada, Iowa make the total cost of coal approximately \$58/ton.

Developing a viable methodology and technique to properly source, test, and then burn mixed-source biofuels is needed if bio-fuels are to become a major replacement for coal. Mixed-sources increase the universe from which materials can be sourced decreasing seasonal fluctuations and decreasing the effect of economic variability (suppliers closing, etc). A negative side to mixed-source biofuels is that they can increase variability in the fuel blend and the lower density requires additional trucks to haul a similar amount of weight.

Biofuels provide an advantage in that they provide a hedge against increasing coal prices and carbon-based emission regulations. Although the United States does not have a mandatory carbon-based cap or trading system, the use of mixed-source biofuels will provide a net reduction in carbon emissions. The reduction in carbon emissions is

from the release of biogenic carbon in the form of carbon dioxide; positioning the State in a leadership position related to net carbon emission reduction initiatives.

Biofuel Market Development

The Lincolnway Energy biofuels project is anticipated to develop an entirely new micro-enterprise segment within Iowa. This biofuels market will likely influence markets in surrounding states as well. Lincolnway Energy is anticipating that biofuels from a variety of sources will be required to meet the fuel demand of the facility.

Lincolnway Energy is expecting to source biofuels initially from Central Iowa; markets are expected to grow from within the State of Iowa, as well as other nearby Midwestern states. Lincolnway Energy is expecting to use wood and cellulosic-based products as a biofuel source, including: railroad ties, softwoods, hardwoods, urban wood wastes, and other wood products from manufacturing, recycling, and timber harvesting/clearing industries. This proposed project is unique in that it is developing a new market (and potentially new processing infrastructure) within the State of Iowa for underutilized wood-based resources.

Lincolnway Energy's demand for biofuels will likely generate suppliers who want to service this steady year-round demand. Lincolnway's demand is expected to ultimately produce a supply chain representing various biofuels. Lincolnway Energy has been in discussion and continues to work with suppliers in the wood processing, recycling, and industrial manufacturing industries to begin developing potential supply chains.

The attached Feasibility study (Tab 6) provides a thorough description of the potential biofuel market and an analysis of several types of potential biofuels.

Fuel Specifications

Lincolnway Energy understands that biofuels must meet specific criteria to reduce emissions, stay efficient and reduce operating costs. The specific criteria for feedstock are not yet specified until test burns are completed and additional data is collected regarding emissions and equipment efficiency. Critical criteria for biofuels will likely include: percent moisture, percent inert material (ash), and particle/piece size. Other limiting factors could be percent phosphorous, sulfur, salt, etc. Potential biofuel providers must also understand the characteristics for unacceptable contamination such as arsenic, asbestos, lead-based paint, etc. Communication regarding feedstock quality will be a critical piece of the conversion toward biofuels; communication will help all parties understand their role in providing an acceptable fuel.

Need for Environmental Assessment

The need for an Environmental Assessment was determined because an Environmental Assessment is a requirement of Section 9004 - Repowering Assistance Payments to Eligible Biorefineries - Catalog of Federal Domestic Assistance Number 10.866.

Likely Emissions

The following table (Table 1) provides an estimate of likely emissions for particulate matter, NO_x, SO_x, carbon monoxide, VOCs, HCl, and HF using PBR coal (representing emissions without implementation of systems to combust biomass). These figures were

based upon data in the *Emission Factors for Priority Biofuels in Minnesota – Final Report*, prepared for the Minnesota Pollution Control Agency.

Table 1 – Projected Emissions for PBR Coal

| Projected Emissions for 300 tons/day of PBR Coal | |
|---|-----------------------|
| Compound | PBR Coal (tpy) |
| PM | 24.1 |
| PM10 | 24.1 |
| NO _x | 125.3 |
| SO _x | 86.7 |
| CO | 99.3 |
| VOC | 18.6 |
| HCl | 8.7 |
| HF | 4.3 |
| TOTAL | 391.1 |

Air Permit

Currently, Lincolnway Energy is in the process of applying/modifying its air quality permit with the State of Iowa. The numbers in Table 1 above show that the facility will likely be permitted as a Title V - Major Source or Title V - Minor Source 250. Additional modifications to the Air permit will be made as the conversion to biomass fuel sources moves forward.

Jobs

The conversion from coal to a biofuel at Lincolnway Energy is expected to create at least two permanent jobs at Lincolnway Energy. According to potential biofuel suppliers, additional jobs for handling, processing, and transporting biofuels from various sources is also expected to create and/or retain a minimum of 10 jobs within Iowa from small business that develop within the near region to supply the required biofuels and sell/maintain equipment required to collect/process biofuels.

Experience and Commitment

Richard Brehm, President - CEO, of Lincolnway Energy is highly qualified to manage this project with project partner EPI. Mr. Brehm understands the economic and environmental implications of developing the required physical infrastructure as well as the required supply chain needed to replace coal. The remaining team members supporting Lincolnway Energy include other Lincolnway staff (with specialization in finance, boiler operations, environmental compliance/health and safety), EPI (the manufacturer and installer of the boiler and ancillary systems), Iowa State University (whose researchers are currently involved at Lincolnway Energy), and Barker Lemar Engineering Consultants, whose staff has over 18 years of experience with permitting, regulatory assistance, and integrated waste management. This team will assist Lincolnway Energy purchase, install, and properly test biofuels.

Education:

Lincolnway Energy is expecting to share how they develop the physical infrastructure to manage and control mixed-source biofuels. Lincolnway Energy and the project partners will also share lessons learned regarding the various materials and how they impact performance and emissions. The project will develop tools for successfully communicating material specifications and educating suppliers.

II. PRIMARY BENEFICIARIES AND RELATED ACTIVITIES:

The purpose of this project is to reduce consumption of PRB coal through the use of biofuels, particularly wood wastes. The switch to biofuels will reduce atmospheric concentrations of carbon dioxide emissions, significantly reduce annual sulfur dioxide emissions, generate less particulate matter, and generate less carbon monoxide. These goals will be accomplished through the combustion of biofuels sourced from Iowa and surrounding states, creating a viable and steady market for wood waste allowing businesses in the near area to expand their biomass markets beyond animal bedding, mulch, and compost.

Currently, the biomass component at Lincolnway Energy is not permitted, and it is not under construction; consequently, the specific markets for biomass have not been developed or contractually obligated. Lincolnway Energy has identified potential biofuel suppliers and has analyzed the feasibility of using the various biofuels identified in the Feasibility Study located in Tab 6.

III. DESCRIPTION OF THE PROJECT AREA:

The present land use of the area is industrial. The Lincolnway Energy biofuel facility will be located within the existing property boundary of the Lincolnway Energy ethanol manufacturing facility. Sheet 2 – Site Vicinity Map (located in Appendix B) provides a 6-mile radius map of the surrounding land uses. The Site Photographs (located in Appendix B) show the location of the biofuel plant and its location on grass (turf) on previously disturbed ground.

A majority of the ground immediately to the north, south, east, and west is row crop agriculture. The City of Nevada, Iowa and Indian Creek is approximately 1.5 miles to the east and the South Skunk River is 3.5 miles to the west. The South Skunk River and Indian Creek are the two primary waterways in the general vicinity of the Lincolnway Energy facility. The nearest sensitive area is the Larson Marsh located north of Lincolnway Energy, (approximately 3,300 feet from the closest edge of the Marsh and the edge of the proposed development). Railroad tracks lie between Larson Marsh and the existing Ethanol plant. Larson Marsh is a 12-acre marsh that was acquired by Story County in 1981. The Story County Conservation Board made wildlife habitat improvements on the area by deepening a natural pothole and developing two islands within the pothole. The County planted native prairie grasses and forbs on the islands and other areas around the pothole. The marsh is a public hunting area.

The City of Ames and the City of Nevada have medical facilities and residential neighborhoods. The medical facilities and the residential facilities are more than 3 miles (in direct line) from the Lincolnway facility.

IV. ENVIRONMENTAL IMPACTS RESOURCE CRITERIA:

1. AIR QUALITY

Assessment Questions:

- 1. Does the proposal require an installation permit, construction permit, operating permit or indirect sources permit in accordance with the Clean Air Act (42 U.S.C. 7400 Section 176 & 171) and follow local pollution control agency rules?**

The existing Lincolnway Energy Ethanol plant requires multiple permits to operate under Iowa law, including air quality construction permits, Title V permits, and storm water permits (see Appendix C). The facility does follow local rules when applicable. The proposal will likely require several new permits and/or additions/amendments to existing permits.

Lincolnway Energy currently requires several permits, specifically permits associated with air containment. Currently, Lincolnway Energy has 27 air containment sources representing an equal number of construction permits. Lincolnway Energy will be required to receive additional construction permits by the Iowa Department of Natural Resources (IDNR) Air Quality Bureau (and other bureaus) for some of the proposed facilities/equipment to be used for the management and combustion of biomass. The equipment to be used for biomass includes: A grizzly screen built into a receiving floor, a transfer conveyor leading from the grizzly screen to a disk screener, a bucket elevator to unload the material from the disk screener and move the feedstock to a fuel storage bin. The fuel storage bins would be emptied by a feed conveyor that fills metering bins, and then the biomass is moved via high pressure blowers to the furnace.

The IDNR Air Quality Bureau will also require that other permits be updated due to planned changes in raw material use, infrastructure, and changes in truck traffic. Lincolnway Energy's air containment sources that may require new or updated (modified) permits/operating parameters might include dust emissions from traffic and the fluid bed combustor itself. The air containment sources will require compliance testing for pollutants, testing might include: Particulate Matter (PM), PM10, Opacity, Sulfur Dioxide (SO₂), Nitrogen Oxides (NO_x), Volatile Organic Compounds, (VOCs), Carbon Monoxide (CM), metals, and other Hazardous Air Pollutants (HAPs). The permit conditions will require varying levels of notifications, reporting, and recordkeeping. The specific type of monitoring (operating condition monitoring and/or continuous emission monitoring) is described in the air containment source permits.

Proposed air quality construction permits for biosolids equipment will be evaluated by the IDNR for conformance under the authority of the Iowa Administrative Code (IAC) Chapter 455B; 567 IAC Chapters 20-31; and Code of Federal Regulations (CFR) parts 51, 52, 60, 61 and 63.

For the pre-operational phase of the process, Lincolnway Energy will need to obtain a test burn variance, perform a test burn, and then perform stack testing to verify that the emissions profile is still within permitted parameters. Performing a test burn will assist in

determining the final design criteria including fuel size, cyclone and baghouse tuning/performance, and feed rates, all of which is required information for the construction permit applications.

Lincolnway Energy will apply for a test burn and receiving permission from the IDNR Air Quality Bureau before testing. Following test burn approval, Lincolnway Energy would need to schedule the test and stockpile the desired test material for completion of the burn.

Lincolnway Energy is anticipating the development and submittal of new construction permits and the modification of existing permits and related operating rate schedules.

Iowa does not have any "non-attainment" areas as defined by the Clean Air Act and Amendments of 1990. A "nonattainment area" as a locality where air pollution levels persistently exceed National Ambient Air Quality Standards, or that contributes to ambient air quality in a nearby area that fails to meet standards.

2. Provide information on the sources and types of any air emissions from the proposal including various chemical emissions, i.e. methanol, particulate matter, etc.

The following table (Table 2) provides an estimate of likely emissions for particulate matter, NO_x, SO_x, carbon monoxide, VOCs, HCl and HF using various ratios of wood to biofuel (specifically 25% wood, 50% wood, 75% wood, and 100% wood) up to 400 tons/day of biofuel. Table 2 also provides standard emissions for PBR coal. These figures were based upon data in the *Emission Factors for Priority Biofuels in Minnesota – Final Report*, prepared for the Minnesota Pollution Control Agency (specifically Table 4-10 - Comparison of Uncontrolled Emission Factors for Biofuels and Conventional Fuels).

Table 2 – Projected Emissions

| Projected Emissions for Varying Levels of Wood | | | | | |
|---|--------------|-----------------|-----------------|-----------------|--|
| All units are in tons per year (TPY) | | | | | |
| Compound | Coal | 25% Wood | 50% Wood | 75% Wood | 100% Wood – 400 ton/day |
| PM | 24.1 | 21.9 | 19.5 | 17.1 | 14.8 |
| PM10 | 24.1 | 21.9 | 19.5 | 17.1 | 14.8 |
| NOX | 125.3 | 174.8 | 224.9 | 273.8 | 323.3 |
| SOX | 86.7 | 65.5 | 44.3 | 23.0 | 1.8 |
| CO | 99.3 | 79.0 | 58.6 | 38.2 | 17.9 |
| VOC | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 |
| HCl | 8.7 | 6.5 | 4.3 | 2.2 | 0 |
| HF | 4.3 | 3.3 | 2.2 | 1.1 | 0 |
| TOTAL | 391.1 | 396.9 | 392.1 | 391.3 | 391.5 |

The numbers in Table 2 show a decreasing trend as the amount of wood increases except for the amount of NO_x. Wood is essentially a low-sulfur fuel generating 30 times less SO_x. Combustion of wood at LWE could generate 30% less particulates, 20% less CO, and 60% less HCL and HF.

Based upon the projected emissions of NO_x (over 300 tons per year) and other emissions, a Title V permit variance or amendment would be required for the combustion of wood. The net effect of emissions (those counted in a Title V application) with wood combustion would be a 1.35% projected increase in total tons emitted (using only those emissions required to be calculated for Title V).

Emissions and Variability in Wood Supply

The following discussion of emissions and variability in wood supply was influenced by the report, "*Emissions from Wood-Fired Combustion Equipment*" provided to the Environmental Management Branch, Ministry of Environment, British Columbia.

One of the key considerations in minimizing air emissions from biomass combustion is to use a combustion system designed for, and appropriate to, the specific fuel to be used. This should include taking into consideration the fuel's moisture, ash, and the fuel's physical size and characteristics (e.g., dry chips, sander dust or wet hog fuel). Changing biomass fuel type or characteristics (perhaps due to poor quality control by the fuel supplier, changes in fuel availability or in response to price variations) without taking into consideration the impact that such changes will have on burner operation will frequently lead to increased emissions.

Compositional and physical factors affect the air emissions released from wood, specifically ash (or incombustibles), moisture, the wood source, and the physical size or nature of the fuel. Chlorine (from saltwater) is mentioned as a major physical factor in the literature; however, Iowa is not expected to manage wood waste cross contaminated with sea water or other major sources of salt.

The ash content of typical wood ranges from 0.2 to 3.0%. However, bark (and hog fuel) can contain 3.5% or more ash depending on the wood species, the handling, procedures, and the amount of dirt included in the fuel.

Fuel made from construction and demolition waste (C&D) can be expected to contain more non-combustibles such as dirt, bits of drywall, and metals (e.g., flashing, trim, nails). Several companies in Canada and the United States are able to produce wood fuel from construction sources while limiting inorganic contamination (ash). Monitoring quality and communicating expected standards are important to biomass facilities working with suppliers.

A system designed for chips may find that the moisture or ash content changes seasonally or with the origin of the residue source. For example, hogged pine beetle wood may have a moisture content of 20% versus 50% for fresher wood. The density and the energy content of the wood also varies with the wood species, with the denser woods having higher energy content per volume. So it is important that the combustor only be fed (or limited to) the type of fuel it was designed for, but also that it be able to respond to changes in quality of the fuel. Frequent operational adjustments may be necessary to maintain low emission levels.

Currently, there are no generally accepted biomass fuel standards in Canada or the United States. To address the issue of biomass fuel quality, sampling, and fuel sources, the European Committee for Standardization, is preparing several technical specifications for

solid biofuels. These standards could be used to develop material specifications for Lincolnway Energy.

Other Biomass Feedstocks

Lincolnway Energy is in the process of evaluating various biomass feedstocks. Emission information was developed by Mr. Mike Murphy, Director of Technology, Energy Products of Idaho (EPI). EPI has installed many biomass facilities in the United States and will serve as a project consultant to Lincolnway Energy during the proposed conversion to biomass combustion.

Table 3 below describes a single data point for each fuel. Lincolnway Energy understands that there will be quite a variation with some of these, depending on the sourcing. For example, Mr. Murphy thought that the moisture content for the railroad ties could range down to 5-10%, the urban wood anywhere between 20-55%, and the pallets may be as low as 5-6%.

Table 3 – Other Data Points for Various Wood-based Fuels

| FUEL MIX | | | |
|--------------------------|----------------------|--------------------------|----------------|
| TYPE | Railroad Ties | Urban Wood Wastes | Pallets |
| Bulk Density (BD) | 8,580 | 8500 | 8403 |
| HHV, Btu/lb | | | |
| As is Moisture % | 26.6 | 50.0 | 14.9 |
| Carbon | 50.8 | 51.45 | 51.67 |
| Hydrogen | 5.50 | 6.38 | 6.27 |
| Sulfur | 0.12 | 0.15 | 0.12 |
| Oxygen | 37.7 | 38.3 | 39.1 |
| Nitrogen | 0.4 | 0.2 | 0.1 |
| Chlorine | 0.02 | 0.0 | 0.03 |
| Ash/Other | 5.46 | 3.55 | 2.77 |

Ash and Fouling Issues

Some materials generate ash which can lead to fouling of heat exchange tubes and other components. The ash composition and ash fusion temps are difficult to characterize on a generic basis; however, Mr. Murphy suggests that the fuels listed in Table 3 above do not appear to warrant concern for ash fouling/fusion issues in the EPI system.

3. **Indicate the existing air quality in the area. Indicate if topographical or meteorological conditions hinder or affect the dispersal of air emissions. Provide information on the anticipated effects on air quality from operation of the facility; and, sources of odors and mitigation measures necessary to minimize off-site migration of odors.**

Existing Air Quality

EPA calculates the Air Quality Index for five major air pollutants regulated by the Clean Air Act: carbon monoxide, nitrogen dioxide, ground-level ozone, sulfur dioxide, and particle pollution (also known as particulate matter and measured in micrograms). For each of these pollutants, EPA has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country. EPA Air Quality standards are provided in Table 4.

Table 4 – EPA Air Quality Standards

| Chemical Constituent | Levels | Units | Notes |
|--------------------------------------|-------------|-------------------------|--------------------------|
| Carbon Monoxide | 35 / 9 | parts per million (ppm) | 1 hr. avg. / 8 hr. avg. |
| Nitrogen Dioxide | .053 | ppm | annual mean |
| Ozone | 0.12 / .075 | ppm | 1 hr. avg. / 8 hr. avg. |
| Sulfur Dioxide | .14 / .03 | ppm | 24 hr avg. / annual mean |
| Particles - 2.5 micrometers diameter | 35 / 15.0 | µg/m ³ | 24-hr avg. / annual mean |
| Particles - 10 micrometers diameter | 150 / 50.0 | µg/m ³ | 24-hr avg. / annual mean |

Source: U.S. Environmental Protection Agency - <http://iaspub.epa.gov/airsdata/adaqs.summary>

The EPA's *AirData*, "County Air Quality Report - Criteria Air Pollutants" for 2008 show Story County and nearby Polk County's air quality to be under the EPA Air Quality standards (See Table 5).

Table 5 – EPA AirData* for Story County and Polk County

| CO (ppm) | | NO2 (ppm) | Ozone (ppm) | | SO2 (ppm) | | PM2.5 (µg/m3) | PM10 (µg/m3) | |
|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------|--------------------|--------------------|---------------|
| <u>2nd Max 1-hr</u> | <u>2nd Max 8-hr</u> | <u>Annual Mean</u> | <u>2nd Max 1-hr</u> | <u>4th Max 8-hr</u> | <u>2nd Max 24-hr</u> | <u>Annual Mean</u> | <u>Annual Mean</u> | <u>Annual Mean</u> | <u>County</u> |
| 1.6 | 1.0 | 0.009 | 0.062 | 0.057 | 0.002 | 0.000 | 9.60 | 21 | Polk Co |
| | | | 0.064 | 0.058 | | | | | Story Co |

* *AirData* reports are produced from a monthly extract of EPA's air pollution database, AQS. Data for this report were extracted on January 10, 2009. They represent the best information available to EPA from state agencies on that date. However, some values may be absent due to incomplete reporting, and some values subsequently may be changed due to quality assurance activities. The AQS database is updated daily by state and local organizations who own and submit the data.

Topography and Meteorological Conditions

The topography of Story County can generally be described as flat to gently rolling. Currently, one of Story County's most predominant natural assets is agricultural land. Approximately 90 percent of Story County land is dominated by row crop fields. Agricultural land dominates the landscape around the immediate vicinity of the proposed biomass facility.

Topographical conditions are not expected to hinder or affect air quality from operation of the facility.

The primary meteorological conditions are also not expected to impact air quality or emissions from the proposed facility. The Iowa Energy Center describes the average wind speed for the City of Ames in Story County to be 14.78 mph providing opportunity to disperse odor and/or permissible air emissions. Dominant wind patterns for Story County like much of Iowa include the strongest winds prevailing from the northwest and the southeast. Winds from the northwest tend to be the strongest.

Potential Odor

The proposed biomass facility will receive and store biomass products indoors. Indoor storage will serve as an odor as well as storm water mitigation measure. The biomass storage building will not be receiving wastes generally considered putrescible; consequently, odor from the biomass facility is not expected to become a major management issue. Grass and agricultural by-products such as corn stover or switch grass are not expected to be used as a fuel; consequently, the production of nitrogen-based compounds (like ammonia related compounds) often associated with grass and similar agricultural products should not be generated. Mitigation measures for odor migrating off site will be to keep the doors closed leading into the biomass receiving area.

4. Provide information on the anticipated effects (including duration) on air quality from construction activities.

Construction is expected to take 16-18 months. Lincolnway Energy will implement Best Management Practices to control dust and particulate matter. Lincolnway Energy does not anticipate the construction of the proposed biofuel facility to cause or exacerbate violations of applicable National Ambient Air Quality Standards.

5. Will the proposal emit large quantities of air pollutants?

Lincolnway Energy submitted a Title V Operating Permit Application and 2006 Emission Inventory to the Iowa DNR – Air Quality Bureau in May 2007. The DNR is expecting to issue a Title V permit sometime in January 2010; this permit will likely be a Major Source – Title V permit. The total tons of regulated emissions are not expected to exceed 500 tons per year.

6. Will any air permits be required including Title V operating permits, Prevention of Significant Deterioration (PSD) permit?

Lincolnway Energy submitted a Title V Operating Permit Application and 2006 Emission Inventory to the Iowa DNR – Air Quality Bureau in May 2007. The DNR is expecting to issue a permit sometime in January 2010. Currently, the Lincolnway Energy site is permitted as a synthetic minor source with regard to Prevention of Synthetic Deterioration (PSD).

7. Will there be other air quality issues resulting from operation of the proposal including; dust, vehicle traffic including cars, trucks and trains, above ground storage tanks, the use of generators or back-up generators?

Lincolnway Energy has submitted the Title V permit application described above and has approximately 27 Construction Permits for various Emission Units at its Nevada, Iowa facility. Additional construction permits may be required for various components of the proposed biomass facility.

Emission Unit – Dust from Traffic

Table 6 below shows the projected increase in dust emissions (particulate matter) due to increased traffic hauling biomass (and not coal), which was calculated based on BTU/lb difference between wood and coal fuels as a 25% increase in the expected truck traffic from current levels were Lincolnway Energy to be fueled solely by wood (100% wood).

Table 6 – Emissions from Truck Traffic

| Truck Traffic - tons per year (TPY) | |
|--|---|
| Source | Vehicle Traffic - 100% Biomass Use |
| Truck Traffic | 0.08 tpy particulate matter |

A Title V permit amendment would not be required for the expected increase in traffic required to haul the necessary biomass because there are no limits in the existing permit application. Particulate matter from truck traffic would be reported semiannually for Title V compliance.

Other Emission Units

Unloading and loading of wood materials was calculated and shown to create a maximum increase in particulate matter of .056 tpy, this increase in particulate matter would not require an increase in permit limits but would require an increase in the permitted throughput limits.

Particulates from the conveying systems and the fugitive emissions from loading, transferring, etc. of ash from wood biomass combustion would increase slightly but would

not require a Title V permit variance. Particulates from the conveying system are projected to increase 0.01 tpy and the particulates from loading, transferring, etc. are expected to increase 0.04 tpy. Lincolnway Energy might be required to increase the total ash mass permitted depending upon the density of the final ash material.

Currently, there are no generally accepted biomass fuel standards in Canada or the United States. To address the issue of biomass fuel quality, sampling, and fuel sources, the European Committee for Standardization, is preparing several technical specifications for solid biofuels. These standards could be used to develop material specifications for Lincolnway Energy.

8. Are there air quality concerns in the vicinity of the proposal that could have a negative impact?

Iowa does not have any "non-attainment" areas. A "nonattainment area" is a locality where air pollution levels persistently exceed National Ambient Air Quality Standards or that contributes to ambient air quality in a nearby area that fails to meet standards.

Mitigation:

Describe the mitigation measures (if necessary):

Emissions and Abatement Equipment

While the uncontrolled, or unabated, emissions will vary somewhat with each of the fuels, most of the final emissions from the unit will be determined by the extent that any added abatement equipment is added to control the final levels.

Unabated levels of NO_x would vary with each fuel, but the use of Lincolnway's Selective Non-Catalytic Reduction (SNCR) system would allow the unit to meet 0.095-0.10 lb/M Btu levels which were initially designed for the coal fuel. SNCR is typically performed in the furnace, where relatively high temperatures serve to initiate the breakdown of urea or ammonia to form the transient species which lead to effective NO_x reduction. The amount of ammonia required for each fuel to meet these levels would vary.

Using limestone in the bed of the furnace is expected to deliver a SO_x capture rate of about 70-75%. For wood-based fuels like urban wood and pallets this limestone system would likely drop the SO_x levels to less than 0.06-0.07 lb/M Btu.

CO emissions for urban wood and pallets would be less than 50 ppm or roughly 0.05-0.06 lb/M Btu.

With the wood materials described above, particulate matter (PM) capture is accomplished by the baghouse; PM should be less than 0.01 gr/sdcf for any of the fuels.

Documentation:

Supporting documentation can be found in Appendix C.

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|------------------------|---------------|--|
| Air Quality | 1 | Erin Schmidt – IDNR – Air Quality Bureau – 515.281.4897. http://www.iowadnr.gov/reap/files/plan_story.pdf , http://www.energy.iastate.edu/renewable/wind/wem/windpower.htm Hard Copy: Title V Permit Application (2007), Env. Permit Application (2004) |

2. SURFACE WATER, WATER SUPPLY QUALITY, GROUNDWATER, STORM WATER, AND WASTE WATER:

SURFACE WATER Assessment Questions:

1. Are there visual or other indications of water quality problems on or near the site?

City and facility staff reported not evidences of water quality problems on or near this site.

Lincolnway Energy has five (5) storm drains that feed the storm water discharge. The primary drainage for the property is the storm water basin at the southwest corner of the property. This basin holds 681,500 cubic feet of water. From the basin, the storm water discharge connects to the city of Nevada's storm water system. The storm water pipe travels south east until it empties into a pond located at the western edge of Nevada.

A reach of the South Skunk River north of Ames is listed as impaired under section 303 (d) of the Clean Water Act. This stream reach is approximately 5 miles from the Lincolnway Energy facility. The Lincolnway Energy facility is located in a separate micro watershed and drainage basin and does not drain to that impaired reach of the South Skunk River. A map of impaired waters is located in Appendix D.

2. Will the proposal involve discharge of sewage effluent into surface water bodies?

This project will not discharge regulated sewage effluent into surface water bodies. The Lincolnway Energy sewage disposal system is a permitted septic tank system.

3. Will the proposal involve a substantial increase in impervious surface areas?

The impervious surface created is not considered substantial considering the impervious surfaces of the existing facility (including paved roads). Although final plans are not in place, estimates performed by Barker Lemar Engineering Consultants place the net increase in impervious surfaces on the property at less than 14% or a net increase of approximately 125,000 square feet.

If so, have runoff control measures been included in the design to insure protection of surface water?

This project will modify/amend the existing NPDES permit (permit number 8562100 – see Appendix F) as necessary. All construction contract documents shall reference the requirements of the NPDES permit and best management practices for controlling pollutants during construction.

Runoff control measures will be included in the design; it is expected that the existing storm water detention basin and connected storm water pipe mentioned above will be used to manage storm water. The proposed facility at the Lincolnway Energy site will follow generally accepted Best Management Practices as outlined in the Iowa Construction Site Erosion Control Manual and the Iowa Department of Transportation Erosion Control Standards.

Lincolnway may be required to submit a Notice of Intent (NOI) as part of the NPDES permit requirements for any storm water discharge permit. The NOI will be submitted to the IDNR at least 24 hours before land disturbing construction activities start. A completed Notice of Intent must include the following:

- The completed form 1415 entitled “Notice of Intent for NPDES Coverage Under General Permit”.
- Proof of Public notification from the two newspapers in the area with the highest circulation.
- Permit fee (if applicable).

4. Is the proposal located in a watershed management plan area?

Neither the South Skunk River or West Indian Creek have watershed management plans.

This project will modify/amend the existing NPDES permit (permit number 8562100 – see Appendix F). All construction contract documents shall reference the requirements of the NPDES permit and best management practices for controlling pollutants.

Runoff control measures will be included in the design of the biofuel facility; it is expected that the existing storm water detention basin and connected storm water pipe mentioned above will be used to manage the additional storm water.

Mitigation:

The Lincolnway Energy site falls will follow generally accepted Best Management Practices as outlined in the Iowa Construction Site Erosion Control Manual and the Iowa Department of Transportation Erosion Control Standards. Existing storm water infrastructure on Lincolnway property will be able to manage storm water from new proposed facility.

Documentation:

Supporting documentation can be found in Appendix D (map of impaired waters).

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|------------------------|---------------|---|
| Surface Water | 2 | Mr. Ryan Porath – Water Superintendent, City of Nevada; Mr. Neal – Wastewater Treatment Plant, City of Nevada http://www.iowadnr.gov/water/watershed/pubs.html#act http://maps.gis.iastate.edu/msiris/ |

WATER SUPPLY QUALITY Assessment Questions:

1. Is the existing water supply adequate to serve the proposal?

Yes, the proposed addition of a biomass facility will not require significant sources of clean water as the material should be kept as dry as possible for eventual combustion. Currently, Lincolnway Energy uses raw water supplied by the City of Nevada; this water is from wells that are approximately 90 feet deep drawing water from an alluvial aquifer near the South Skunk River. The raw water for the existing ethanol plant (not water for the proposal) is cleaned using reverse osmosis systems and a dissolved iron removal system.

2. Is the water supply to be used by the proposal safe and free from contamination?

The Lincolnway facility is currently operational and the existing raw water supply is safe and free from contamination – it is provided by the City of Nevada. The 2007 Water Quality Report – Consumer Confidence Report Notification (online) showed that safe potable water is provided by the City of Nevada.

Will additional demand for water affect any raw water sources?

The proposed Lincolnway biomass facility is not expected to have an additional demand for water; consequently the proposal for a biofuel facility will not affect any raw water sources. Biofuels are to remain dry for combustion; the addition of water to biofuels is not advantageous to biofuel combustion processes.

Will wastewater discharges from any proposal's source affect any water source?

The proposed Lincolnway biomass facility (proposal) is not expected to have new wastewater discharges. Biofuels are to remain dry for combustion; the addition of water to biofuels is not advantageous to biofuel combustion processes.

This project will modify/amend the existing NPDES permit (permit number 8562100 – see Appendix F) as necessary.

Will a spill prevention plan be employed?

Lincolnway Energy currently has a spill prevention plan in place. On all new projects (like the proposed biofuel facility) that require a project specific permit, a Pollution Prevention Plan will be included as a requirement of the Construction Documents. The Pollution Prevention Plan will be posted with the construction documents.

Are any waterways affected by this proposal?

This project is not expected to affect waterways. There are no creeks or streams on the proposal's target property. Storm water from Lincolnway Energy enters the on site storm water detention basin which then enters an enclosed storm sewer which flows to storm water ponds operated by the City of Nevada.

This project will modify/amend the existing NPDES permit (permit number 8562100 – see Appendix F) as necessary. Currently, storm water discharges consisting of both storm water and other permitted discharges, as described in the NPDES permit, ultimately flow to West Indian Creek or South Skunk River. Analytical and sampling methods are specified in the NPDES permit. Additional references in the permit are made to 40 CFR Part 136 and Iowa Administrative Code Chapter 63.

Will the proposal involve drilling a well?

This proposal does not involve drilling a well.

Will the proposal use an existing well for its water supply?

This proposal will not use an existing well for water supply.

Will the proposal provide water for human consumption or for manufacturing?

This proposal will not provide water for human consumption or for manufacturing.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix E.

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|---|---------------|---|
| Water Supply Safe Drinking Water Act (42 USC 5.300) | 0 | Mr. Ryan Porath – Water Superintendent, City of Nevada; Mr. Neal – Wastewater Treatment Plant, City of Nevada; http://www.ci.nevada.ia.us/pdf/water-dept-ccr-2007.pdf |

GROUND WATER Assessment Questions:

Iowa does not have any designated sole source aquifers as referenced at the EPA website

1. Will the proposal contaminate groundwater by spills or wastewater from construction or operation?

The proposal is anticipating using relatively dry biofuels such as wood to burn as an energy source, replacing coal. This relatively dry biofuel would not be considered a hazard to soils or groundwater (in the event of a spill) as the material is natural (it is wood). Some of the equipment used for construction and for the operation of the biofuel facility might have liquids that could spill. Lincolnway Energy currently has a spill prevention plan in place.

Mitigation:

Describe the mitigation measures (if necessary):

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|------------------------|---------------|---|
| Ground Water | 0 | Mr. Ryan Porath – Water Superintendent, City of Nevada; Mr. Neal – Wastewater Treatment Plant, City of Nevada |

STORM WATER Assessment Questions:

1. Will the proposal disturb 1 acre or more of land?

The proposal for the construction of a biofuel facility is expected to disturb more than 1-acre of land. The Lincolnway Energy plant currently has an NPDES permit (permit number 8562100); this permit would be amended in conjunction with consultation from the Iowa DNR – NPDES Section. The existing permit describes outfalls, effluent limitations, and monitoring and reporting requirements.

2. Will the existing or planned storm water disposal treatment system adequately serve the proposal?

Currently a 4-acre storm water detention basin serves the Lincolnway Energy property – this basin is located west of the administration building. This storm water detention basin is

adequate to manage storm water from the proposed facility. From the basin, the storm water discharge connects to the city of Nevada's storm water system. The storm water pipe travels south east until it empties into a pond located at the western edge of Nevada.

3. Will the proposal require a storm water discharge permit?

The Lincolnway Energy plant currently has an NPDES permit (permit number 8562100); this permit would be amended in conjunction with consultation from the Iowa DNR – NPDES Section.

4. Will the proposal require a storm water prevention plan?

The Project Engineer and/or Architect will contact IDNR to discuss any additional SWPPP requirements. This SWPPP has not yet been prepared.

Mitigation:

Describe the mitigation measures (if necessary):

The Lincolnway Energy plant currently has an NPDES permit (permit number 8562100); this permit would be amended in conjunction with consultation from the Iowa DNR – NPDES Section. The existing permit describes outfalls, effluent limitations, and monitoring and reporting requirements. The Project Engineer and/or Architect will contact IDNR to discuss any additional SWPPP requirements.

Documentation:

Supporting documentation can be found in Appendix F.

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|-----------------|--------|---|
| Storm Water | 2 | http://www.state.ia.us/epd/wastewtr/stormwtr/storwtr.htm Notice of Intent form: http://www.iowadnr.com/water/stormwater/forms/5421415.pdf Public Notice of Storm Water Discharge: http://www.iowadnr.com/water/stormwater/forms/pub_gen2.pdf Notice of Discontinuation: http://www.iowadnr.com/water/stormwater/forms/2_nod.pdf Summary of General Permits: http://www.iowadnr.com/water/stormwater/forms/2_ppp.pdf Hard Copy – NPDES Permit |

WASTE WATER Assessment Questions:

1. Will the existing or planned wastewater treatment system adequately serve the proposal and surrounding area?

The proposal will use the existing onsite wastewater treatment system (septic tank and adsorption trenches)- Story County Board of Health permit number 2225. The existing wastewater treatment system consists of a 1,500 gallon tank and 300 lineal feet of distribution/adsorption trenches; this system is able to serve Lincolnway Energy and the additional employees (2) expected to work in the biofuel area. The permitted septic system has the capacity to handle wastewater generated by the proposal. The production of ethanol does not generally create significant volumes of wastewater. Boiler water, when generated, is not waste water, but this water is managed as storm water.

Describe the planned wastewater treatment system/s to be used and indicate their capacity and their adequacy in terms of the degree of treatment provided.

The proposal will use the existing on-site wastewater treatment system (septic tank). The existing wastewater treatment system consists of a 1,500 gallon traditional septic tank, distribution box, and three shallow distribution beds/trenches having an overall adsorption field area equivalent to 300 lineal feet. This system is thought to be adequate system of wastewater treatment and it is thought to be adequate for the two additional employees to be added to operate the biofuel facility.

2. How far away is the wastewater treatment plant from the proposal?

The waste water treatment plant is approximately 2 miles east of the Lincolnway Energy facility. Lincolnway Energy has a septic tank system on- site.

Will its proximity negatively affect the proposal?

The proposal will utilize the existing septic tank and distribution bed system, consequently the proximity of the city's wastewater treatment plant will not negatively affect the proposal.

3. If on-site systems are planned, are the lot sizes and soils suitable for this use?

Lincolnway Energy uses an approved on site septic tank system (permit 2225) for wastewater. The proposed biofuel facility is not expected to require additional wastewater infrastructure.

4. Will the proposal require a pretreatment agreement with the local wastewater authority?

A pretreatment agreement is not required for the proposal as the proposal is not expected to generate wastewater treated off-site.

5. If the proposal will construct its own wastewater treatment facility that discharges to surface water, have the required wastewater construction permit and NPDES permit been acquired?

The proposal will not construct its own wastewater treatment facility that discharges to surface water.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix G.

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|-----------------|--------|--|
| Waste Water | 0 | Mr. Ryan Porath – Water Superintendent, City of Nevada; Ms. Margaret Jaynes, Environmental Specialist, Story County Health Department, ph. (515) 382-7242 Hard Copy of onsite wastewater treatment and dispersal system |

3. SOLID WASTE MANAGEMENT AND HAZARDOUS WASTE MANAGEMENT

Assessment Questions:

1. Does the proposal involve any hazardous waste dumps, facilities handling chemicals of an explosive matter or solid waste disposal sites?

The Lincolnway Energy proposal for the storage and conveyance of biofuels will not involve hazardous waste dumps nor will the facility handle chemicals of an explosive nature, nor will the proposal involve solid waste disposal sites.

2. Are there toxic chemicals or radioactive materials stored or produced in the proposal's area?

Toxic chemicals are produced in the proposal's area. See Attachment H for a map of facilities registered as storing or producing hazardous waste and/or generating toxic releases. Lincolnway Energy tracks pollutants (see tables in Attachment H). Radioactive materials are not stored or produced in the proposal's area.

A Phase I Environmental Site Assessment was prepared for Lincolnway Energy in 2004,

Will the proposal require EPA identification numbers?

Lincolnway Energy's proposal will not require a RCRA permit to operate.

Environmental Assessment – Lincolnway Energy, LLC (Nevada, Iowa)

Biofuel Proposal to Replace Fossil Fuels

3. Will the existing waste disposal system adequately serve the proposal during construction and operation?

The Boone County Sanitary Landfill will accept municipal solid waste including construction debris. Scrap metal generated during construction will be recycled in Ames, Iowa or Des Moines, Iowa. Concrete and/or cinder block scrap can be disposed of in Boone County or if this particular material is salvaged and not cross contaminated, then it can be recycled in Des Moines, IA.

Discuss the types and quantities of waste, including waste disposal techniques.

The proposed biofuel facility may create wastes from rejected materials that do not meet specifications. Materials rejected might have oversized organic materials (limbs or stumps that are too large), plastic and other inorganic wastes, or material that could bind/clog the conveyance systems. Waste products will be disposed of according to Iowa Administrative Code and policies of the Boone County Sanitary Landfill. Most wastes are expected to be landfilled. Organic wastes that are banned from disposal will be ground as mulch and/or composted. Quantities of waste are unknown; however, if Lincolnway Energy screens or rejects 2% of the accepted materials, and the facility is accepting a maximum of 400 tons per day of biofuel, then approximately 8 tons/day of material would be disposed (landfilled) or recycled (composted/mulched).

4. How far away is the servicing landfill?

The permitted sanitary landfill is located to the west 25 miles near the City of Boone, IA in Boone County.

5. Will the proposal require a Special Waste Authorization?

The proposal will not require a special waste authorization as by-products (ash) is recycled as an ingredient for the manufacture of cement. Off-sized or rejected materials will not require a special waste authorization, organic yard debris (including trees trimming waste) can be reground and used, composted, or mulched and not buried at the landfill; dimensional lumber, plastics, and other wastes will be disposed as municipal solid waste.

6. Will its proximity negatively affect the proposal?

The proximity of the landfill will not negatively affect the proposal.

7. Will the owners or renters of the proposal be required to pay service costs? If so, will this create a financial hardship?

The tipping fees at the landfill, container rental, and pull fees will be paid by Lincolnway Energy to manage municipal solid waste, these fees will not create a financial hardship.

8. Will the proposal employ Spill Prevention Control Measures and Counter - Control measures (SPCC)?

An SPCC plan will be employed for the biofuels facility, even though relatively dry organic (wood) feed stocks are expected to be received as fuel. This new SPCC plan will amend the existing SPCC plan at the facility.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Including:

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|-----------------------------|--------|---|
| Solid Waste Management | 2 | http://www.iowadnr.gov/waste/sw/permitting.html Theresa Stiner, IDNR Waste Management Division, ph. 515.281.8646; Scott Smith, Director, Boone County Landfill 515.433.0591; Matt Nieswender, Senior Project Manager, Barker Lemar Engineering Consultants, 515.256.8814 |
| Toxic & Radioactive Hazards | 0 | http://egis.hud.gov/egis/ http://www.epa.gov/enviro/html/em/ |

4. GENERAL LAND USE

Assessment Questions:

1. Is the proposal consistent with local, regional or state comprehensive plans, policies, ordinances, and goals?

This plan is consistent with the State of Iowa's 2008 Energy Independence Plan which stated *"Iowa's position as a leader in the new energy economy is dependent on the ... success of this plan. This plan clearly states that Iowa must boldly pursue a strong position in the emerging energy economy worldwide. To fulfill this goal, the Office of Energy Independence makes the following policy recommendations: ... **promote the development of an environmentally sound biomass industry in Iowa.**"* The existing ethanol plant is also part of the States Energy Independence Plan which includes recommendations for biofuel plants including: *"Enhance the economic and environmental viability of the biofuels industry, Develop a biomass feedstock supply infrastructure for second generation biofuels, and support development and deployment of integrated biorefineries"*.

The City of Nevada has a Comprehensive Plan posted on the City's website. This plan states, Communities prepare and adopt comprehensive plans for legal purposes. Section 414.3 of the Code of Iowa enables cities to adopt zoning and subdivision ordinances to promote the "health, safety, morals, or general welfare of the community". Land use regulations such as zoning ordinances recognize that people in a community live cooperatively and have certain responsibilities to one another. These regulations establish rules that govern how land is developed within a municipality and its extraterritorial jurisdiction.

According to the City of Nevada's Comprehensive Plan (2003), Nevada had nearly 78 acres of industrial land within the city, which is 5.6% of its overall land. This is a significantly smaller percentage than comparable cities. Comparable cities had up to 3% more industrial land. Nevada's ratio of industrial land to population was half that of comparable cities in Iowa. To meet the city's growing commercial demand, the Nevada Plan projected a need to develop between 23 and 41 acres of commercial land and 369 to 477 acres of industrial land. Some of this industrial ground was zoned industrial and it was developed by Lincolnway Energy. The Lincolnway Energy facility as a whole unit does fit the land uses envisioned by the City of Nevada to help the City grow and prosper.

2. Does the proposal comply with existing zoning regulations?

Existing zoning is General Industrial for the proposal's site. The proposal complies with the City of Nevada's General Industrial Classification for the proposal's site.

3. What are the existing land uses adjacent to the proposal?

The proposal will be within the industrial footprint of the ethanol plant. Land uses adjacent to the site are industrial to the east. The land uses are agricultural beyond the railroad tracks to the north as well as east beyond the other industrial facility. Land is in agricultural production to the west and to the south. Two residential homes exist to the south (across Lincoln Hwy.). These homes are approximately 900 feet from the land proposed for biofuel management. A farm and residence is located to the northeast approximately 2,300 feet from the proposed site.

Classify and estimate the number of affected land areas by type of current land use such as residential, commercial, agricultural, rangeland, forestland, etc.

The proposed site is within the industrial application of the Lincolnway Energy ethanol facility; this is the only land type (industrial) directly affected by the proposal.

What effect will the changing land use have on the proposal's site?

The site will remain classified as industrial; the proposals site will lose a section of grass lawn so the biofuel facility can be constructed.

How will this affect the surrounding land uses?

There are no suspected affects on surrounding land use; the proposed biofuel facility will be constructed with the existing ethanol plant property, no new property will be developed for this proposal.

4. Does the community (neighbors) think the proposal will be compatible with existing uses?

The proposal will be compatible with the existing General Industrial classification of the parcel. The proposed use of biofuels has been announced in the facility's newsletter which is distributed freely to interested parties; many neighbors are known to have received the latest newsletter announcing this proposal to develop and initiate the first steps in the development of a biofuel facility. Exact figures of newsletter distribution are not tracked.

5. What is the total land area required or proposed for purchase and the amount of land that will be disturbed by construction and operation?

No new land will be purchased for the proposal. The total land area required for the proposal will be approximately 125,000 to 170,000 square feet or 3-4 acres. The proposed facility will be within Lincolnway Energy's existing/developed property.

6. Will the proposal contribute to urban sprawl?

No new land will be purchased for the proposal; the proposed facility will be within Lincolnway Energy's existing/developed property – an industrial ethanol plant. This proposal will not contribute to urban sprawl.

7. Will the additional school age children in the proposed development exceed the capacity of the existing or planned school facility?

This question is not applicable as school age children are not part of this industrial proposal.

8. Do local retail services meet the needs of proposal's occupants/users?

This question is not applicable as this industrial proposal is not serviced by traditional retail services. Retail services for employees are available in the City of Ames to the West and the City of Nevada to the East; both cities are within 5 miles of the proposal.

Are social services currently located in close proximity to the prospective users/residents?

Social services are located in the nearby cities of Ames and Nevada.

9. Are non-emergency and emergency health care services located within a reasonable proximity to the proposal?

Emergency and non-emergency health care services are located in the nearby cities of Ames and Nevada.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

A copy of the Zoning Ordinance can be obtained at http://www.amlegal.com/nevada_ia/, the zoning was adopted October 23, 2006, by Ordinance No. 904.

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|---|--------|--|
| Conformance with Comprehensive Plans and Zoning | 1 | http://www.energy.iowa.gov/OEI/docs/OEI_REPO_RTFINAL2008.pdf |
| Compatibility and Urban Impact | 0 | http://www.ci.nevada.ia.us/pdf/comprehensive-plan.pdf , http://www.amlegal.com/nevada_ia/ |

5. TRANSPORTATION

Assessment Questions:

- 1. Is there a military airfield or primary/commercial service airport near the proposal's site?**

The closest primary/commercial airport near Nevada, Iowa is located in Des Moines – this airport in Des Moines is not considered “near” the proposal’s site as since it is located over 30 miles away.

The Ames Municipal Airport is the closest municipal or commercial airport to the proposed facility. The Ames Airport has two paved runways; at azimuths of 136⁰/316⁰ and 16⁰/196⁰. Where the two runways intersect to the center of the Lincolnway Energy site is 6.0 miles at azimuth of 68⁰. The runways can be extended and the Clear Zones and flight paths will not be in conflict with the Lincolnway facility as long as the airport remains at the same location and with the same runway alignments.

- 2. Will transportation infrastructure, parking and mass transit services be adequate to meet the needs of the proposal's users? Will the proposal encourage additional private vehicle trips and increase energy consumption? Will the proposal increase car, truck or train traffic to and from the proposal?**

The proposed site will add two employees; it is likely these employees will drive a car alone to work. Regarding the City of Nevada’s overall commuter/mean travel time to work; The City is rapidly becoming a city where employees leaves the City of Nevada for work in Ames or the Des Moines Metro Area. The City’s 2003 Comprehensive Plan stated that in 1990 the mean travel time to work for Nevada residents was 14.7 minutes. This increased to 18.1 minutes in 2000, according to the U.S. Census. This would indicate that the average Nevada resident works outside of the city, likely in the Ames area, and that this

trend is increasing. 2000 Census data indicates that about 81 percent of all workers drive to work alone; 10 percent use carpools, and just under 6 percent walk to work and about 2 percent work at home.

Currently, coal is hauled to the ethanol plant from Williams, Iowa approximately 40 miles north of the production facility in trucks weighing an average of 25 tons. The proposal is expected to increase truck traffic by 33 percent up to 50 percent if 100% of the coal is replaced with biofuels. Because most biofuels have a lower Btu value and lower density than coal, a larger volume of biofuels is needed to replace the Btu value compared to a ton of coal; additionally, the biofuels require additional trucks to haul the same weight. Lincolnway does not anticipate that 100 percent of the coal will be replaced immediately.

The east-west railroad lines adjacent to the existing Lincolnway Energy site is kept in good condition – this rail line is the busiest section of railroad in the State of Iowa with rail traffic at 188.2 million annual gross tons per mile.

Will traffic patterns be affected or additional roads be required?

Traffic patterns will remain the same so trucks stay on paved surfaces that reduce the dust created for some of the nearby commercial and residential properties. Signs along the highway indicate the preferred (paved road) truck route. Additional roads will not be required.

Will increased car, truck, or train traffic increase air emissions? Has potential traffic from all sources emissions been considered with emissions from the proposal? What types of goods will be transported to and from the proposed project, are any dangerous or hazardous materials? Will goods or materials transported to or from the proposed project be covered?

Truck traffic (trucks hauling biomass) will increase; however, train traffic associated with the unloading and loading of coal cars in Williams, Iowa will be reduced as will the truck traffic hauling this coal to the Lincolnway facility in Nevada. Lincolnway Energy has not performed a detailed analysis of the net increase or decrease in traffic generated air emissions. The use of Biofuels and the reduction in some air emissions resulting from the use of biofuels may decrease the net air emissions of the entire facility (including truck and train related emissions).

Vehicle traffic is calculated to increase 0.08 tons per year at 100% biomass use.

Dangerous or hazardous material will not be part of the normal material mix transported to and from the proposed project.

Loads of biomass will generally be covered to the proposed project to reduce wind blown litter and driving hazards. Wastes such as ash or screened materials will also be covered as the material leaves the site via truck.

3. Will the proposal create any transportation safety issues?

The transportation of biomass near the Lincolnway Energy property (zoned Industrial) will use Interstate 35 and Lincolnway Highway. The Lincolnway Energy site is served by surrounding bridges, roads, and highways, none of which are temporarily or permanently embargoed at this time; this would include Interstate 35, U.S. Highway 30, and County roads with related bridges consisting of E-41, 220th St., 580th Ave., 590th Ave. and 600th Ave. in central Story County, Iowa.

Unloading and loading of wood materials would create a maximum increase in particulate matter of .056 tpy this would require an increase in permit limits but would require an increase in the permitted throughput limits.

4. When offloading or loading goods and materials, will there be strategies in place to address spill prevention and remediation?

Lincolnway Energy will employ and/or modify an existing spill prevention, control, and countermeasure plan for activities associated with the proposal.

5. Will the proposed project employ a Hazardous Operation Manual?

The Proposal will not employ a Hazardous Operation Manual.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|---|---------------|---|
| Runway Clear Zones & Accident Potential Zones | 0 | IDOT website, John Franklin, Senior Project Engineer, P.E. 10/26/2009. |
| Transportation | 0 | IDOT website (http://www.iowadot.gov/) and Story County Engineer Darren Moon, P.E. 515-382-7355, 10/26/09. |

6. NATURAL ENVIRONMENT

Assessment Questions:

1. **Identify what the proposed project's construction and operation effects will be to wildlife, their habitats and vegetation.**

The proposal will be constructed and operated within the existing footprint of an existing and operating ethanol plant. The ground is currently disturbed earth that has been planted with turf/lawn grass. Consequently the physical construction of the site is anticipated to have a negligible effect on wildlife, their habits, and vegetation. The biomass itself will be primarily from construction wastes (wood), pallets (wood), and wood from tree waste and tree trimmings. Live trees cut for the sole purpose of creating fuel is not expected to be the type of biomass used in this proposal.

2. **Will the proposal cause a change in migration patterns of any wildlife due to destruction of habitat?**

The proposal is not going to cause a change in migration patterns of any wildlife due to destruction of habitat. The type of ground to be destroyed to develop and operate this proposed facility is a turf grass lawn. Wetlands, streams, ponds, prairie, grasslands, etc are not going to be impacted by the construction and operation of the proposed facility.

Will species populations be forced to relocate or be reduced through mortality impacts as a result of the proposal?

The proposal is not going to cause a change in migration patterns of any wildlife due to destruction of habitat. The type of ground to be destroyed to develop and operate this proposed facility is a turf grass lawn.

3. **Is the proposed project adjacent to any of the following (all are considered formally classified lands)?**

The site is not near a National Park, State Park or Preserve, or Wildlife refuge and wilderness area. See Appendix I for maps and web print outs. This site is not near National Parks and Monuments, National Natural Landmarks, National Battlefield Park sites, National Historic sites, National Historic Landmarks, Wilderness areas, Wildlife refuges, National seashores, lake shores, and trails, Bureau of Land Management (BLM) administered lands, National forest and grasslands, or Native American owned lands and leases administered by the Bureau of Indian Affairs (BIA).

Larson Marsh is a 12-acre marsh that was acquired by Story County in 1981. The Story County Conservation Board made wildlife habitat improvements on the area. The large pothole was deepened, and two islands were created within the pothole. Native prairie grasses and forbs were planted on the islands and other areas around the pothole. The marsh is a public hunting area. Larson marsh is 0.5 miles due north of the Lincolnway Energy facility. The proposal is not expected to have any adverse affect on the facility. The land separating the Lincolnway property from the marsh is owned by private landowners and the railroad.

There are not any formally designated rangelands or forestlands in Iowa. There are no recreation/local points of interest within close proximity to the proposal's location (the old golf course to the west of the facility [which is visible in some aerial photographs] was removed in the spring of 2009 and planted in corn).

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|---|--------|--|
| Natural Environment | 0 | http://data2.itc.nps.gov/parksearch/state.cfm?st=ia ; http://www.iowadnr.com/wildlife/wmamaps/pubhunt.html ; http://www.iowadnr.com/state_parks "; http://george.ecity.net/iaccb/links.htm ; http://beacon.schneidercorp.com/Application . |
| Rangelands and Forestlands | 0 | www.iowadnr.com/forestry/forests.html . |
| State Protected Water Areas | 0 | http://www.iowadnr.gov/riverprograms/protected.html |
| Formally classified lands, Recreation, Points of Interest | 0 | http://data2.itc.nps.gov/parksearch/state.cfm?st=ia ; http://www.iowadnr.com/wildlife/wmamaps/pubhunt.html ; |

7. HUMAN POPULATION SOCIO-ECONOMIC/ENVIRONMENTAL JUSTICE

Assessment Questions:

1. Will the proposed project significantly alter the demographic characteristics of the community?

According to data located in Appendix J, the proposed project will not significantly alter the demographic characteristics of the community. The community is a growing community and has been attracting population in the 20-34 year old range.

According to the City's Master Plan (2003): "From 1980 to 2000 Nevada grew by 13%. This was slightly faster than Ames at 11%, but slower than Polk City (41%) and Indianola (20%). Most of this growth occurred during the 1990s when Nevada grew by nearly 11%. The largest increases in real population over predicted population occurred in age cohorts ranging from 20 to 34 years old. This explains the increase in population for children under the age of 9. As Nevada demonstrated, attracting childbearing age cohorts is a key component to strong population growth in the future. Nevada lost

population among residents 45 to 59. During the 1990s a high percentage of Nevada's population of peak wage earners left the city."

2. Will the proposed project severely alter residential, commercial or industrial uses?

The proposed project is not going to be located in a minority and low income population and it is not located in a minority or low income community. The proposal will not require additional industrial lands.

3. Will the proposed project have a disproportionate impact to low income or minority populations or the public in general resulting from any changes in land use, noise, water, or transportation?

This proposal will not have a disproportionate impact to low income or minority populations or the public in general resulting from changes in land use because the land use will remain industrial, water usage will be minimal for the proposal, and transportation (trucks hauling raw materials/biomass) will increase by a maximum of 50%. Noise associated with the proposal will be minimal as material is not going to be processed (ground) on site.

4. Will the proposal directly displace individuals or families?

The proposal will not directly displace individuals or families it is being built on the grounds of an existing ethanol plant.

5. Will the proposal either significantly increase or decrease employment opportunities?

Lincolnway Energy is expecting that two jobs directly associated with the proposal will be created. Data regarding additional employment opportunities from biofuel suppliers are not yet available.

6. Does the proposal's location provide adequate access to police, fire and emergency medical services?

Lincolnway Energy's existing ethanol plant provides adequate access to police, fire and emergency medical services; consequently, the proposal for the addition of a biofuel facility will also have the same access.

7. Does the proposal create obstacles for emergency services to other areas around the proposal's location?

Lincolnway Energy's existing ethanol plant provides adequate access to police, fire and emergency medical services; consequently, the proposal for the addition of a biofuel facility will not create obstacles for emergency vehicles.

8. Is the quality of the emergency services adequate to meet the proposal's needs?

Emergency services from the City of Ames, Story County, and the City of Nevada are adequate to meet the proposal's needs.

The City of Nevada Community Fire Department has two (2) off-road attack trucks, a ladder truck, and three (3) pumper trucks to provide fire service protection. The Fire Department also has the ability to respond to hazardous material spills.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix J, Including:

Form RD 2006-38 Civil Rights Impact Analysis Certification.

A copy of the ethnic list from the census quickfacts website

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|------------------------------------|---------------|--|
| Displacement | 0 | rurdev.usda.gov/regs/forms/2006-38.pdf |
| Low Income or Minority Populations | 0 | http://quickfacts.census.gov |
| Employment and Income Patterns | 0 | http://quickfacts.census.gov |
| Demographic or Character Changes | 0 | http://quickfacts.census.gov http://www.ci.nevada.ia.us/nevada-departments-fire-equipment.php |

8. CONSTRUCTION

Assessment Questions:

1. How will air quality and water quality impacts of the proposed project be handled during construction?

State permits for air quality and storm water runoff will be received by Lincolnway Energy before construction begins; permit language regarding air and water quality will be part of the construction contract.

2. What will be the noise impacts to any affected land use from the proposal's construction activities?

The impact of the exact noise is not known at this time as specific construction equipment is not known. However the 1,000 feet buffer from the projected construction site to the residential homes will help to significantly reduce decibels.

3. How will fugitive dust from construction of the proposal be handled?

State code (Iowa Administrative Code 567-23.3(2) c.) will be used to develop an approvable plan to control dust from construction.

4. Describe the measures that will be employed to limit soil erosion and stream siltation.

The state NPDES permit and the sites storm water pollution prevention plan will be used to develop site specific actions to control soil erosion and stream siltation. Silt fencing, compost socks, seeding, minimal excavation, and other best management practices are commonly used in Central Iowa to manage soil erosion and stream siltation.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix Including

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|------------------------|---------------|--|
| Construction | 2 | IA Iowa Administrative Code 567-23.3(2) c.) http://www.cpwr.com/hazpdfs/kfnoise.PDF |

9. ENERGY

Assessment Questions:

1. Will the proposal require an increase in use of the area's energy resources (electricity, natural gas, coal, or fuel)?

The proposal is designed to reduce the use of coal through the conversion of the ethanol manufacturing plant from coal to biomass or cellulosic fuels such as wood. Currently, 300 tons per day of coal are used to generate steam for the ethanol plant. Lincolnway Energy will initially divert approximately 25,000 tons annually of coal with a goal of diverting 100,000 tons of coal annually using biofuels (specifically cellulosic based fuels such as wood).

The facility does not anticipate using significantly more electricity or fuel required to operate equipment. Natural gas is not anticipated to be used on the site.

Will there be a need for increased capacity of any energy resources supply due to the proposal?

Biofuels will be required to displace the coal currently used at the Lincolnway Energy Ethanol Plant.

2. Will the proposal provide energy, (renewable i.e. ethanol, wind, etc.) if so discuss the beneficial impacts.

Biofuels are being used instead of coal to generate heat, which generates steam, which in turn is used in the production of ethanol.

The conversion from coal to biofuels is expected to significantly reduce the use of a non-renewable energy sources and significantly reduce sulfur emissions, carbon dioxide, and other air emissions. Powder River Basin (PRB) coal produced in Wyoming generates approximately 200 pounds of carbon dioxide per million Btu. Lincolnway's conversion to solid biofuels as an energy source is expected to reduce atmospheric concentrations of carbon dioxide emissions by 100% when fully functional. Biofuels contain "biogenic" carbon. Under international greenhouse gas accounting methods developed by the Intergovernmental Panel on Climate Change, biogenic carbon is part of the natural carbon balance and it will not add to atmospheric concentrations of carbon dioxide.

Regarding sulfur emissions, PRB coal requires Lincolnway Energy to add limestone for sulfur scrubbing. The use of biofuels by Lincolnway Energy is expected to reduce the added expense of sulfur emission reduction infrastructure. Lincolnway's conversion of biofuels (wood) is expected to reduce annual sulfur dioxide emissions by 70% or more (wood is essentially a low-sulfur fuel generating 30 times less SO_x). Combustion of wood at Lincolnway Energy could generate 30% less particulates, 20% less Carbon monoxide, and 60% less hydrochloric acid (HCL) and hydrogen fluoride (HF).

3. Discuss any steps taken by the proposal to conserve energy.

Final plans for the proposed biofuel facility have not yet been completed.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix

Including

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|-----------------|--------|--|
| Energy | 1 | |

10. MISCELLANEOUS

Assessment Questions:

- 1. Is the site appropriate for the proposal's activities and facilities in accordance with the Quiet Communities Act regulation Title 24 (Housing and Urban Development) CFR Part 51, Subpart B.?**

The site is appropriate for industrial / commercial use and the noise levels produced by various site activities. The addition of biomass will add additional truck traffic to/from the site, but receiving and storage will be enclosed and is not expected to contribute to the net noise footprint more than the existing coal handling, receiving, storage process.

2. Will the proposal contribute excessive noise levels in the vicinity of the project?

No excessive noise will be generated. The external noise level around the coal receiving and storage process areas and from trucks averages less than 75 dB. The operating equipment of the boiler, fans, conveyors and coal grinder (presently running coal) will be essentially the same equipment when operating on biomass, and will not increase or change the noise levels in the area. The addition of the biomass storage building and unload building will not increase the noise footprint of the facility more than coal storage and receiving. The facility is set back from the property line and highway enough that existing noise levels are attenuated to less than 70 dB at the property line.

3. Discuss the noise levels from construction and operation of the proposal to nearby noise sensitive receptors; and sound attenuation or any other mitigation measure taken to reduce or eliminate adverse effects from unacceptable noise levels.

There will additional noise during the building and construction phase of the project, but the site of the storage building and receiving building is set back from the property line and roadway enough to provide some construction noise dissipation.

The propagation of noise depends on many factors including atmospheric conditions, ground cover, and the presence of any natural or man-made barriers. As a general rule, noise decreases by approximately 6 dB with every doubling of the distance from the source. Consequently, if construction noise reached 93 dB at 50 feet, then the same noise would be 68 dB at 1,000 feet

Lincolnway Energy will be sensitive to the residents of nearby homes.

4. Will the proposal pose any safety or health concerns to the surrounding area?

Lincolnway staff does not anticipate that the proposal will create any increased health or safety risks and that the proposal will not trigger additional process safety management actions.

5. Will the proposal create excessive vibrations in the vicinity of the proposed project?

Lincolnway Energy safety staff does not anticipate that the proposal will create excessive vibrations in the vicinity.

6. Will the proposal be located in a fire-prone location or create a fire-prone area?

The proposal is not located in a fire prone area.

7. If the proposal creates or handles materials containing any radio-active materials discuss the effects and any proposed mitigation measures.

Not applicable

8. Discuss the proposal's aesthetic effect on the environment and vicinity, including any proposed mitigation measures.

The proposal will be located more than 700 feet from Lincoln Highway, north of the administration building. The proposed aesthetics effects are considered negligible considering the proposed biofuel facility is an operating ethanol plant and a fertilizer manufacturing facility.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|--------------------------------------|---------------|---|
| Noise (24 CFR Part 51, Subpart B) | 0 | Dave Sommerlot, Plant Manager, Lincolnway Energy, LLC |
| Safety & Health | 0 | Dave Sommerlot, Plant Manager, Lincolnway Energy, LLC |

V. COASTAL ZONE MANAGEMENT AREAS

Iowa does not have any coastal zone management areas.

VI. CULTURAL RESOURCES, HISTORICAL, ARCHAEOLOGICAL

Assessment Questions:

Will there be demonstrable destruction or physical alteration of the natural or man-made environment that will affect a historical structure or archeological resources?

There will not be a destruction or physical alteration of the natural or man-made environment that will affect a historical structure or archeological resource. There is not a historic property (those properties that are listed on the National Register or are eligible for listing) on or near the proposed site. A property is considered eligible when it meets specific criteria established by the National Park Service.

1. Is proposal consistent with existing architectural styles, particularly in historic areas?
Not applicable. The architecture will be consistent with an industrial ethanol plant.

2. Has background information been sought from local, regional, tribal, or state historic commissions (including but not limited to SHPO)?

SHPO was contacted directly by Lincolnway Energy, verbal response from SHPO indicated that SHPO would not comment on the proposal's area until asked by USDA Rural Development (National Office) to begin/complete an analysis of the proposed site.

3. Is the proposal covered under a Programmatic Agreement (PA) or Programmatic Memorandum of Understanding (PMOU)?

The proposal is not covered under the Programmatic Memorandum of Understanding between Iowa Department of Economic Development and the Iowa State Historic Preservation Office.

The proposal site was profoundly disturbed during the construction of the Lincolnway Energy Ethanol Plant.

4. If the proposed project will affect a National Historic Landmark, contact the USDA RD servicing official who will consult with the Secretary of the Interior/National Park Service.

Not Applicable.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix K

Including:

Documentation from the Section 106 Process

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|--|--------|---|
| Historic, Cultural, and Archaeological (36 CFR Part 800) | 0 | Programmatic Memorandum of Understanding Between the Iowa Department of Economic Development and the Iowa State Historic Preservation Office Regarding Consultation under Section 106 of the National Historic Preservation Act |

VII. WILD AND SCENIC RIVERS

Assessment Questions:

- 1. Iowa does not have any Wild and Scenic River as defined under the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271) as referenced at the National Park Service website**

Will any state of Iowa important protected water areas be affected by this proposal?

No Iowa important protected water areas will be affected by this proposal. See informational sheet E for list of Iowa protected water areas.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|-----------------------------|---------------|---|
| Wild and Scenic Rivers | 0 | www.rivers.gov |
| State Protected Water Areas | 0 | http://www.iowadnr.gov/riverprograms/protected.html |

VIII. BIOLOGICAL RESOURCES CRITICAL HABITAT OR ENDANGERED/THREATENED SPECIES ACT

Assessment Questions:

1. Is there a federally listed threatened and endangered species present in the proposed area?

One federally listed plant species were identified as potentially growing in Story County, IA: Prairie Bush Clover (*Lespedeza leptostachya*). *L. leptostachya* grows in native dry sandy tall grass prairie areas.

This federally listed plant and the related habitats are not located on the proposed area's profoundly disturbed ground, now in turf grass. The proposal is not located adjacent to this type of prairie habitat, nor is the proposal's located on or adjacent to critical habitat; the land adjacent to the proposal's area is industrial/developed ground.

2. Will any federal candidate species be affected by the proposal?

Four federal candidate species were identified using the U.S. Fish and Wildlife website: Eastern Massasuga (*Sistrurus catenatus catenatus*), Sheepnose Mussel (*Plethobasus cyphus*), Dakota Skipper (*Hesperia dacotae*), and the Spectaclecase (mussel) (*Cumberlandia monodonta*). The proposals turf grass and adjacent industrial environment does not match the environment/listed habitats related to these four species.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix L.
Including:

Endangered species list for the project county

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|--|---------------|--|
| Endangered Species Act (50 CFR Part 402) | 0 | midwest.fws.gov/RockIsland/activity/endangrd/ia_list.htm ; http://www.fws.gov/Endangered/candidates/index.html ; http://ecos.fws.gov/conserv_plans/servlet/gov.doi.hcp.servlets.PlanReport?plan_id=3836&region=3&type=CCAA&rtype=1 |
| State Listed Species | 0 | http://www.fws.gov/midwest/endangered/lists/iowa_cty.html ; http://www.iowadnr.gov/wildlife/files/wildinfo.html |

IX. IMPORTANT FARMLAND

Assessment Questions:

1. What is the zoning of the proposed project's property?

The proposal will be constructed on land zoned as General Industrial. Source for this information is the City of Nevada's website (<http://www.ci.nevada.ia.us/pdf/pz-zoning-map.pdf>).

2. If this land is zoned agricultural is the land "committed" to urban development or water storage, this includes land that has been zoned for other uses besides agriculture even if it is currently being farmed?

Not applicable

3. If the property is zoned for agricultural use is this land considered Important Farmland?

Not applicable.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix
Including:

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|---|--------|--|
| Agricultural Lands Farmland Protection Policy Act of 1981 7 CFR Part 658 | 0 | |

X. FLOODPLAIN MANAGEMENT and WETLANDS MANAGEMENT

FLOODPLAIN Assessment Questions:

1. Will the proposal be located in the 100-year floodplain or designated floodway?

The proposal is not located in the 100-year floodplain or designated floodway.

2. Is the proposal a critical action located in the 500-year floodplain?

The proposal is not a critical action located in the 500-year floodplain.

Mitigation:

Describe the mitigation measures (if necessary):

Documentation:

Supporting documentation can be found in Appendix M.

Including:

A photocopy of the FEMA Flood Hazard Boundary Maps/Flood Insurance Rate Map or the NRCS soil map for the project site and flood prone soil list.

A completed FEMA Standard Flood Hazard Determination (FEMA Form 81-93, Oct 02) (this form can be found at <http://www.fema.gov/pdf/nfip/sfhdf.pdf>).

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|---|--------|---|
| Floodplains E.O. 11988 (24 CFR Part 55) | 0 | http://msc.fema.gov/webapp/wcs/stores/servlet/CategoryDisplay |

WETLANDS

Assessment Questions:

1. Will the proposed project affect or be affected by a wetland?

The proposal will not be affected by a wetland. The proposal is currently turf grass lawn and paved roads; the proposal's site is surrounded by industrial buildings and paved roads; consequently there is no indication of a wetland.

2. Will the proposed project involve dredging or filling in a wetland?

The proposal will not involve dredging or filling a wetland.

Documentation:

Supporting documentation can be found in Appendix N.

Including:

**A copy of the National Wetlands Inventory Map
AND
County Hydric Soils list and soil map for the project site**

| Impact Category | Rating | Date/Name/Title of Contact or Informational Source |
|--|--------|---|
| Wetlands E.O. 11990 (24 CFR Part 55) | 0 | www.nrcs.usda.gov/technical/efotg; Matt Nieswender, Senior Project Manager, Barker Lemar Engineering, October 20, 2009; |

XI. COASTAL BARRIER RESOURCES SYSTEM

Iowa does not have any coastal barrier areas.

XII. STATE ENVIRONMENTAL POLICY ACT

Assessment Questions:

1. Is the proposal subject to the State Environmental Policy Act?

The State of Iowa does not have a separate Environmental Policy Act.

2. Summarize the results of compliance with the States requirements and attach documentation.

Not applicable.

XIII. INTERGOVERNMENTAL REVIEWS

The State of Iowa has revised the review process for meeting the requirements of E.O. 12372. Only applications for federal assistance filed by State Agencies are subject to review.

XIV. ENVIRONMENTAL ANALYSIS OF PARTICIPATING FEDERAL AGENCY

Indicate if another Federal Agency is participating in the proposal either through the provision of additional funds, a companion project, or a permit review authority.

No other Federal Agency is participating in the proposal except the United States Department of Agriculture (USDA).

XV. REACTION TO PROJECT

Discuss any negative comments or public views raised about the proposal from an environmental standpoint and the consideration given to these comments. Indicate whether a public hearing or public information meeting has been held either by the applicant or Rural Development to include a summary of the results and any objections raised. Indicate any other examples of the community's awareness of the proposal, such as newspaper articles or Public Notifications.

A public hearing for this project informational meeting has not been held by Lincolnway energy or Rural Development. An article in the company's newsletter referenced the potential switch to biomass.

XVI. CUMULATIVE IMPACTS

Summarize the cumulative impacts of this proposal and the related activities. Give particular attention to land use changes and air and water quality impacts. Summarize the results of the environmental impact analysis done for any of the related activities and/or your discussion with the sponsoring agencies. Attach available documentation of the analysis.

The conversion from coal to biofuels for the Lincolnway Energy ethanol plant is expected to significantly reduce the use of a non-renewable energy sources and significantly reduce sulfur emissions, carbon dioxide, and other air emissions. Lincolnway Energy will initially divert approximately 25,000 tons annually of coal with a goal of diverting 100,000 tons of coal annually using biomass (specifically cellulosic based fuels such as wood).

Powder River Basin (PRB) coal produced in Wyoming generates approximately 200 pounds of carbon dioxide per million Btu. Lincolnway's conversion to solid biofuels as an energy source is expected to reduce atmospheric concentrations of carbon dioxide emissions by 100% when fully functional. Biofuels contain "biogenic" carbon. Under international greenhouse gas accounting methods developed by the Intergovernmental Panel on Climate Change, biogenic carbon is part of the natural carbon balance and it will not add to atmospheric concentrations of carbon dioxide.

Regarding sulfur emissions, PRB coal requires Lincolnway Energy to add limestone for sulfur scrubbing. The use of biofuels by Lincolnway Energy is expected to reduce the added expense of sulfur emission reduction infrastructure. Lincolnway's conversion of biofuels (wood) is expected to reduce annual sulfur dioxide emissions by 70% or more (wood is essentially a low-sulfur fuel generating 30 times less Sox). Combustion of wood at Lincolnway Energy could generate 30% less particulates, 20% less Carbon monoxide, and 60% less hydrochloric acid (HCL) and hydrogen fluoride (HF).

Biofuels will likely increase NOx emissions generating a net increase in emissions 10-20%. The combustion of coal requires Lincolnway Energy to add anhydrous ammonia to reduce oxides of nitrogen (NOx). Specific emission reductions will depend, in part, on the mix of biofuels received.

Truck Traffic must be increased to haul the biofuel required to displace coal. Currently, trucks are used to haul coal from the rail yard in Williams, Iowa. Because the biomass has a lower density and lower Btu value than coal, more trucks (33% to 50% more) will be required to haul the biofuel. The low population density, excellent condition of roads and bridges, close access to Interstate 35 and the proximity to industrial properties near the proposal's property help to attenuate the effects of the probable increase in truck traffic. Currently, the nearby industrial sites use trucks to haul corn, ethanol, corn oil, and fertilizer.

Depending upon the economic of transportation, wood fuels could be hauled by rail to further attenuate the impact of truck traffic. Another option to attenuate the impact of truck traffic is to review hauling biofuels with natural gas powered vehicles. Natural gas technology is rapidly improving and the infrastructure is rapidly developing in Iowa to support Class 8 trucks operating on compressed natural gas or liquefied natural gas. Natural gas could be used in Central Iowa due to the relatively flat terrain and natural gas fueling infrastructure planned for Des Moines. Natural gas used in large trucks can significantly cut air emissions without compromising haul weights.

The proposed biofuel facility to be constructed on the property of an existing ethanol plant zoned General Industrial. The proposal is not expected to consume additional lands or place a significant burden on water supplies and the facility is not expected to negatively influence the successful operation of the on site septic system. Endangered and threatened species do not appear to have appropriate habitat on or near the proposal. Nearby residential houses (three total homes) are located a minimum of 1,000 feet from the proposal's site so fugitive sound leaving the site during construction of operation should remain near 70 dB.

XVII. ADVERSE IMPACTS

Summarize the potential adverse impacts of the proposal as pointed out in the above analysis.

Unabated levels of NOx would vary with each fuel, but the use of Lincolnway's Selective Non-Catalytic Reduction (SNCR) system would allow the unit to meet 0.095-0.10 lb/M Btu levels which were initially designed for the coal fuel. SNCR is typically performed in the furnace, where relatively high temperatures serve to initiate the breakdown of urea or ammonia to form the transient species which lead to effective NOx reduction. The amount of ammonia required for each fuel to meet these levels would vary. Using limestone in the bed of the furnace is expected to deliver a SOx capture rate of about 70-75%. For wood-based fuels like urban wood and pallets this limestone system would likely drop the SOx levels to less than 0.06-0.07 lb/M Btu. CO emissions for urban wood and pallets would be less than 50 ppm or roughly 0.05-0.06 lb/M Btu.

With the wood materials described above, particulate matter (PM) capture is accomplished by the existing baghouse; PM should be less than 0.01 gr/sdcf for any of the fuels.

Lincolnway Energy will initially divert approximately 25,000 tons annually of coal with a goal of diverting 100,000 tons of coal annually using biomass (specifically cellulosic based fuels such as wood).

XVIII. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

Discuss the feasibility of alternatives to the proposal and their environmental impacts. These alternatives should include;

Lincolnway Energy will require that the biofuel facility be located on the site of the existing ethanol plant so the biofuel can be blended and or used 100% to generate the required steam need to operate the ethanol plant. Energy Products of Iowa has successfully designed and built biofuel facilities, it is their specific expertise with the existing coal system and their expertise with several types of biofuel systems that is driving the facilities design.

If no action is taken, the Lincolnway Energy ethanol manufacturing facility would not replace the use of fossil fuels used to produce heat at their facility. The May 5, 2009, Presidential Directive issued to Secretary of Agriculture Thomas R. Vilsack to aggressively accelerate the investment in and production of biofuels (published in the **Federal Register** on May 7, 2009 (74 FR 21531–21532) would not have an opportunity to be showcased.

Renewable energy financing is needed for Lincolnway Energy to replace the use of fossil fuels in their plant operations by installing new biomass energy systems.

Lincolnway Energy's project will meet the goals of the Presidential directive by enhancing both the economic and environmental viability of bio-fuel use in Iowa. Lincolnway Energy is looking to replace a substantial amount of non-renewable resource, specifically Powder River Basin (PRB) coal with wood and cellulosic-based wastes. Developing a viable methodology and technique to properly source, test, and then burn mixed-source biofuels is needed if bio-fuels are to become a major replacement for coal.

XIX. MITIGATION MEASURES

Describe any measures which will be taken by the Applicant or required by Rural Development or any permitting agencies to avoid or mitigate identified adverse impacts. Analyze the environmental impacts and potential effectiveness of the mitigation measures.

Lincolnway Energy has is very familiar with the Iowa Department of Natural Resources, the City of Nevada, and Story County's' permitting/ordinance/rule requirements for air, wastewater, and storm water management. The existing ethanol manufacturing facility is subject to New Source Performance Standards (specifically, Performance for Industrial-Commercial-Institutional Steam Generating Units) and National Emission Standards for Hazardous Air Pollutants Standards. Lincolnway's existing Selective Non-Catalytic Reduction (SNCR) system would allow the unit to meet 0.095-0.10 lb/M Btu levels which were initially designed for the coal fuel. SNCR is typically performed in the furnace, where relatively high temperatures serve to initiate the breakdown of urea or ammonia to form the transient species which lead to effective NOx reduction. The amount of ammonia required for each biofuel to meet these levels would vary. Using limestone in the bed of the furnace is expected to deliver a SOx capture rate of about 70-75%. For wood-based fuels like urban wood and pallets this limestone system would likely drop the SOx levels to less than 0.06-0.07 lb/M Btu. CO emissions for urban wood and pallets

would be less than 50 ppm or roughly 0.05-0.06 lb/M Btu. A Bubbling Fluid Bed Baghouse is used (with related technology) to capture particulates, lead, fluoride, etc.

Lincolnway Energy operates a continuous monitoring system which measures the opacity, NOx, SO₂, CO, and the opacity of emissions. Lincolnway Energy reports CO₂ (a greenhouse gas) emissions to the State of Iowa.

Best management practices will be implemented for control of storm water during construction to reduce soil erosion, dust, and soil loss. Lincolnway Energy has paved internal roads to mitigate fugitive dust emissions.

XX. CONSISTENCY WITH RURAL DEVELOPMENT ENVIRONMENTAL POLICIES

According to the USDA website (<http://www.rurdev.usda.gov/>) Rural Development program goals are developed and advanced in a manner that will protect, enhance, and restore the environment. This proposal is significantly decreasing non-biogenic greenhouse gases. The co-location of this proposal on previously disturbed land currently zoned General Industrial, the near zero disturbance of natural wildlife habitats, and the rural location of this project appears to meet the goals of USDA Rural Development.

USDA Rural Development gives equal consideration to environmental quality and economic, social, and other relevant factors in program development and decision making processes. The co-location of this proposal at an existing ethanol plant is not consuming prime agricultural land, nor is it displacing low income families; this proposal will create approximately two jobs on site while providing the necessary market (and income) for suppliers. Lincolnway Energy does not believe that this proposal will create irreconcilable impacts, direct or indirect, on the assessment categories. Lincolnway Energy continues to work with state and local regulators to implement and manage regulatory compliance matters regarding air, land, and water resources.

Rural Iowa is often a leader spurring opportunity for Iowans; recent shifts in the production of grapes and wineries is an example of rural Iowa (and USDA) helping to develop a new market in Iowa that creates income, jobs, and improves the quality of life. Lincolnway Energy believes developing a biofuels infrastructure has the same opportunity to create jobs for Iowans and improve the quality of life for families trying to stay in small towns and rural communities.

Lincolnway Energy understands that before Rural Development can agree to provide financial assistance for a special project, it must consider the environmental impacts of the proposed action and ensure that steps are taken to avoid or mitigate any adverse environmental impacts.

Rural Development Environmental Determination
 The following recommendations shall be completed:

a. Based on an examination and review of the foregoing information and such supplemental information attached hereto, I recommend that the approving official determine that this project will not have a significant effect on the quality of the human environment.

b. I recommend that the approving official make the following compliance determinations for the below-listed environmental requirements.

| Not In Compliance | In Compliance | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Clean Air Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Federal Water Pollution Control Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Safe Drinking Water Act - Section 1424(e) |
| <input type="checkbox"/> | <input type="checkbox"/> | Endangered Species Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Coastal Barrier Resources Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Coastal Zone Management Act - Section 307(c)(1) and (2) |
| <input type="checkbox"/> | <input type="checkbox"/> | Wild and Scenic Rivers Act |
| <input type="checkbox"/> | <input type="checkbox"/> | National Historic Preservation Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Archaeological and Historic Preservation Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Executive Order 11988, Floodplain Management |
| <input type="checkbox"/> | <input type="checkbox"/> | Executive Order 11990, Protection of Wetlands |
| <input type="checkbox"/> | <input type="checkbox"/> | Farmland Protection Policy Act |
| <input type="checkbox"/> | <input type="checkbox"/> | Departmental Regulation 9500-3, Land Use Policy |
| <input type="checkbox"/> | <input type="checkbox"/> | Departmental Regulation 4300-4, Civil Rights Impact |
| <input type="checkbox"/> | <input type="checkbox"/> | State Office Natural Resource Management Guide |
| <input type="checkbox"/> | <input type="checkbox"/> | Subtitle B, Highly Erodible Land Conservation and Subtitle C, Wetland Conservation of the Food Security Act |

c. I have reviewed and considered the types and degrees of adverse environmental impacts identified by this assessment. I have also analyzed the proposal for its consistency with RD environmental policies; particularly those related to important farmland protection and have considered the potential benefits of the proposal. Based upon a consideration and balancing of these factors, I recommend from an environmental standpoint that the assessment

- Be approved
- Not be approved because of the attached response.

Signature of RD Preparer

Date

Title _____
 (§1940.302 of this Subpart for listing of officials responsible for preparing assessment.)

Signature of Concurring Official
(When required by §1940.316 of this Subpart)

Date

Title _____

I have reviewed this environmental assessment and supporting documentation. Following are my positions regarding its adequacy and the recommendations reached by the preparer. For any matter in which I do not concur, my reasons are attached as Exhibit _____.

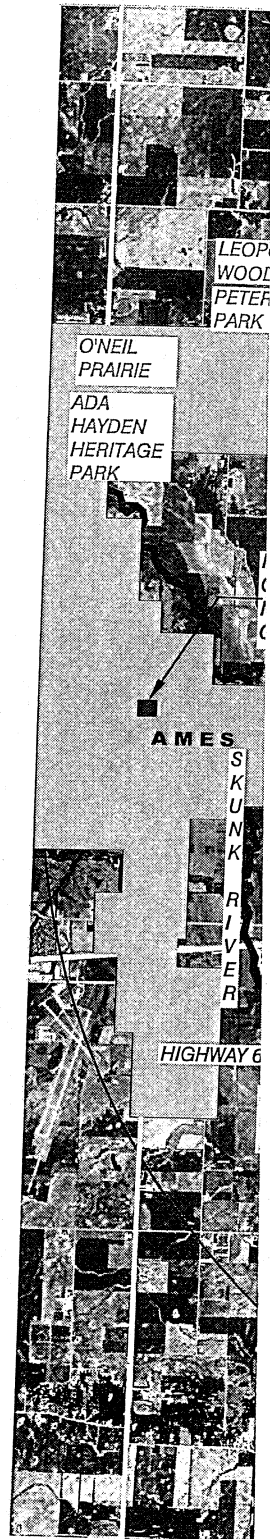
| Do Not Concur | Concur | |
|--------------------------|--------------------------|------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Adequate Assessment |
| <input type="checkbox"/> | <input type="checkbox"/> | Environmental Impact Determination |
| <input type="checkbox"/> | <input type="checkbox"/> | Compliance Determinations |
| <input type="checkbox"/> | <input type="checkbox"/> | Project Recommendations |

Signature of State Environmental Coordinator
(When required by §1940.316 of this Subpart)

Date

Appendix A
MAP OF PROJECT SITE

Filename: M:\LINEN\09001 - USDA REAP Grant Development\CAD\SITE MAP.dwg - Last Edited: Oct 22, 2009 16:03 - By: tloven



LEGEND

- RIVER/CREEK
- HISTORIC PROPERTY
- NATURAL HABITAT
- HOSPITAL
- RESIDENTIAL NEIGHBORHOOD

SCALE

0 3000 6000 FT.

Copyright © 2009 - Barker Lemar Engineering Consultants

| REVISION: | DATE: | DESCRIPTION: |
|-----------|-------|--------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |

LINCOLN WAY ENERGY, LLC
 NEVADA, IOWA
 PROJECT NO: LINEN 09001
 DRAWING DATE: OCTOBER 2009

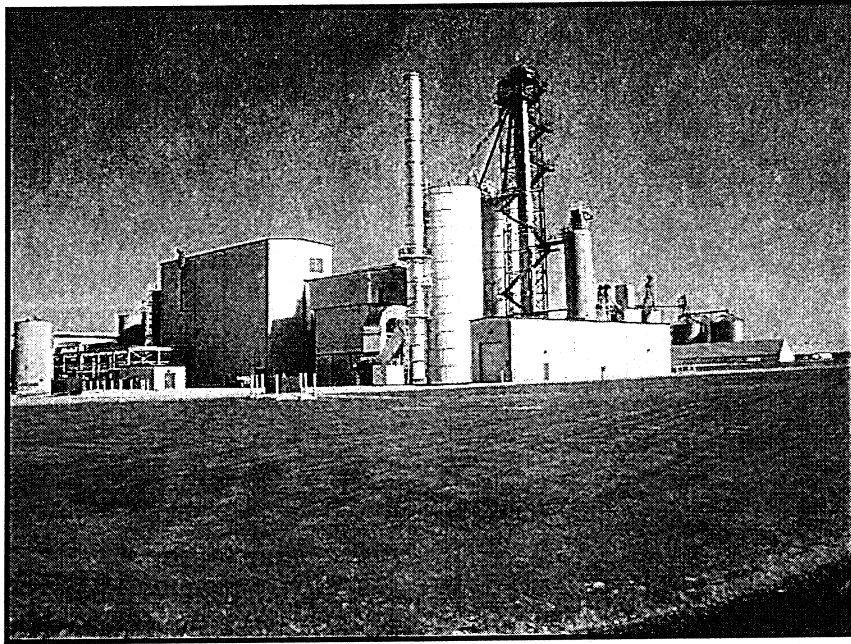
SITE VICINITY MAP

BARKER LEMAR
 ENGINEERING CONSULTANTS

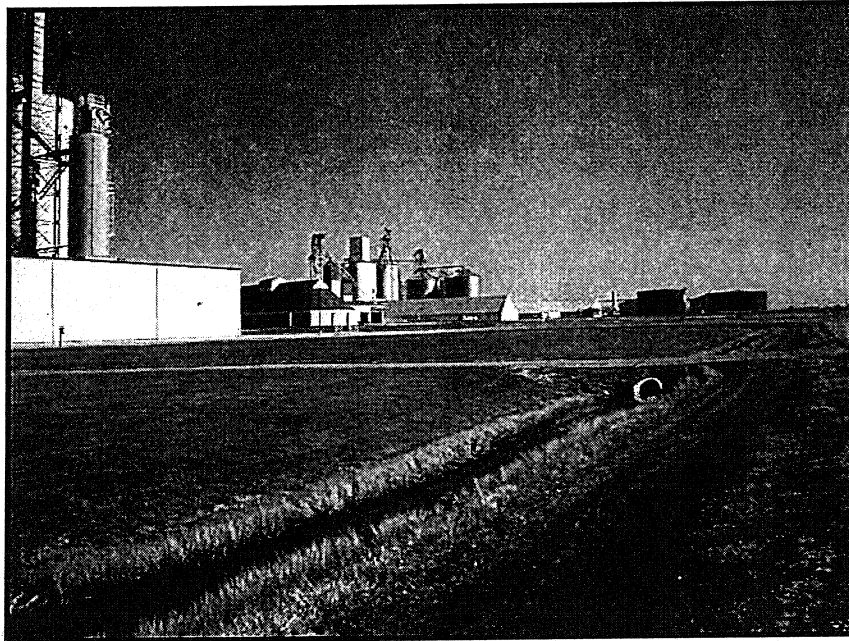
1801 Industrial Circle - West Des Moines, Iowa - 50265
 Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerlemar.com

SHEET
2

Appendix B
SURROUNDING AREA MAPS, SITE PHOTOS, AERIAL PHOTO



Picture 3. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is to the northeast.



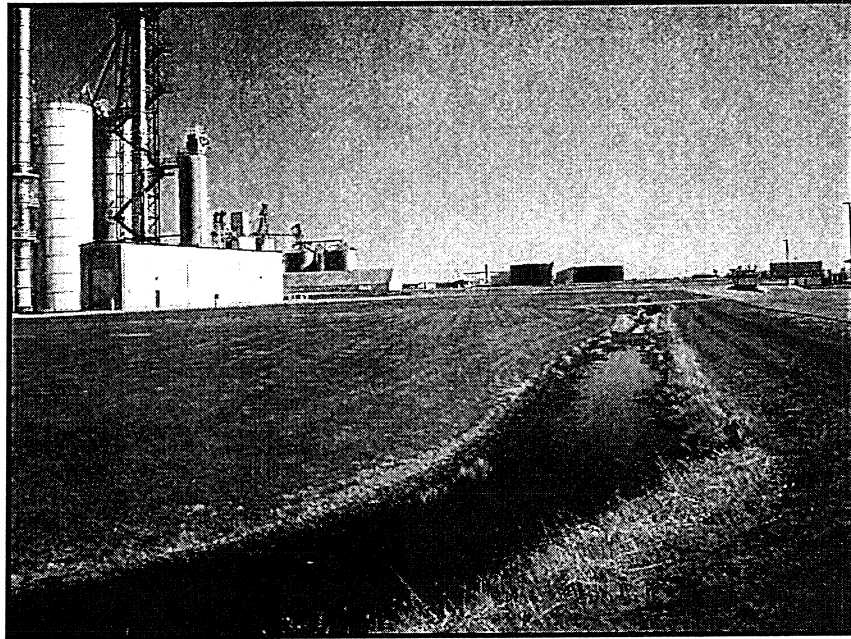
Picture 4. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is to the east showing a storm water channel.

PHOTO DOCUMENTATION
LINCOLNWAY ENERGY, LLC
NEVADA, IOWA
PROJECT NO. METRO 09001

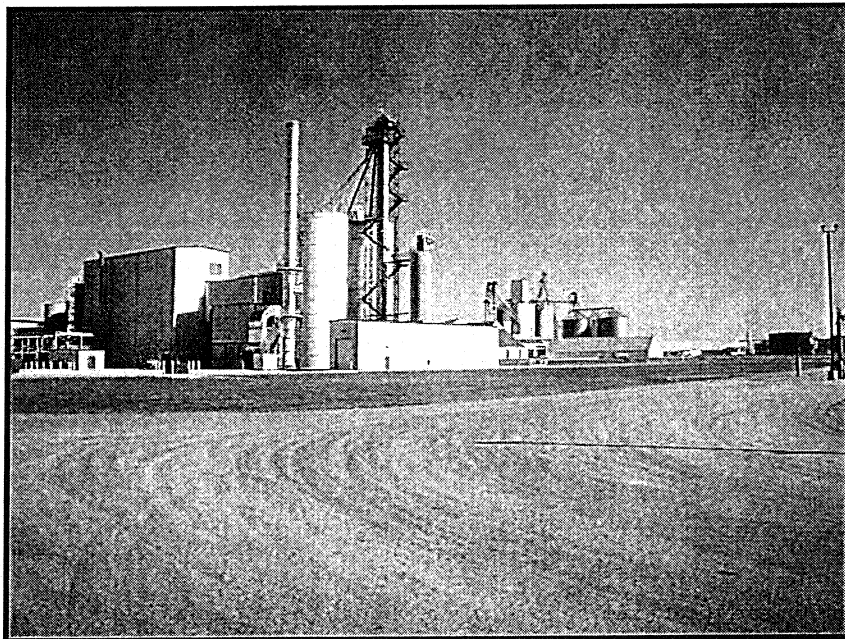
BARKERLEMAR
ENGINEERING CONSULTANTS

FIGURE

2



Picture 5. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is to the east showing a storm water channel.

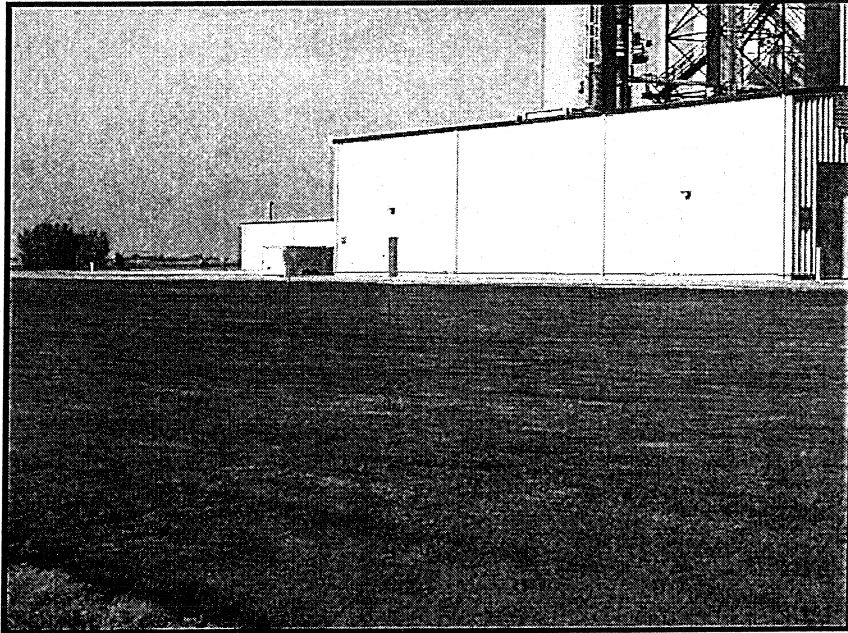


Picture 6. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is to the northeast showing paved roads

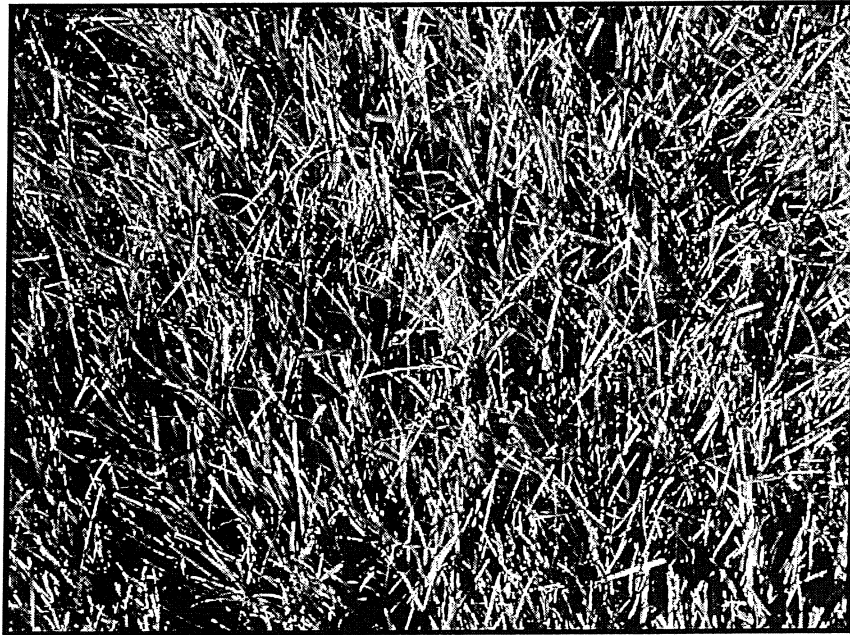
PHOTO DOCUMENTATION
LINCOLNWAY ENERGY, LLC
NEVADA, IOWA
PROJECT NO. LINEN 09001

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FIGURE
3



Picture 7. Proposed area for Biofuel Facility – at Lincolnway Energy, LLC. View is to the northwest. 10/15/09



Picture 8. Close up of turf at proposed site for Biofuel Facility – at Lincolnway Energy, LLC Story County Iowa (Nevada,IA) . 10/15/09

PHOTO DOCUMENTATION
LINCOLNWAY ENERGY, LLC
NEVADA, IOWA
PROJECT NO. METRO 09001

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FIGURE
5

Appendix C
AIR QUALITY



http://www.epa-echo.gov/cgi-bin/ideaotis.cgi
 Last updated on Friday, September 18th, 2009.

Enforcement & Compliance History Online (ECHO)

You are here: [EPA Home](#) [Compliance and Enforcement](#) [ECHO](#) [Search Data](#) [Search Results](#)



Search Results (Air Program)



84 Records Returned

[New Search](#)

Information on the [enforcement process](#) is available on the FAQ page. Entries in gray text denote records that are not federally required to be reported to EPA. These data may not be complete.

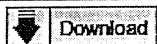
[Add/Remove Columns](#)

| Facility Information <i>(Select Name to Read Report)</i> | Program ID# | Inspections (5 yrs) | Qtrs in Non Compliance (3 yrs) | Current HPV | Informal Enforcement Actions/NOVs (5 yrs) | Formal Enforcement Actions (5 yrs) |
|---|-------------|------------------------|-----------------------------------|-------------|--|---------------------------------------|
| ALLIANT INDL SERV ENERGY APPLICATIONS STORY CO JUSTICE-1315 S B AVE NEVADA, IA 50201 | 1916900148 | | n/a | n/a | | |
| ALMACO INC 99 M AVE NEVADA, IA 50201 | 1916900125 | | | no | | |
| AMERICAN PACKAGING CORP 103/125 W BROAD ST STORY CITY, IA 50248 | 1916900118 | 3 | | no | | |
| AMES FEED & SUPPLY INC 2020 E LINCOLN WAY AMES, IA 50010 | 1916900154 | 1 | n/a | n/a | | |
| AMES LABORATORY-DOE-ISU-PAINT/AC SHOP & MECH MAINT BLDG-3&6 KOOSER DR AMES, IA 50011 | 1916900129 | | n/a | n/a | | |
| AMES MUNICIPAL UTILITIES & AMES COMBUST TURBINE - (SEE COMMENTS) AMES, IA 50010 | 1916900015 | 5 | | no | 3 | |
| BACON FUNERAL HOMES INC 1418 FAWCETT PKWY NEVADA, IA 50201 | 1916900151 | | n/a | n/a | | |
| BARILLA AMERICA 3311 E LINCOLN WAY AMES, IA 50010 | 1916900134 | 2 | | no | 2 | 2 |
| BECKER UNDERWOOD 801 DAYTON AVE AMES, IA 50010 | 1916900162 | | | no | 1 | |
| BELL SALVAGE 500 FREEL DRME AMES, IA 50010 | 19169C0004 | | n/a | n/a | | |
| BENSON MOTOR INC 1613 S DUFF AVENUE AMES, IA 50010 | 19169C0005 | | n/a | n/a | | |
| BENSON MOTORS INC 1613 S DUFF AVE AMES, IA 50010 | 1916900030 | | | no | | |
| BOURNS, INC. 300 AIRPORT ROAD AMES, IA 50010 | 1916900055 | | n/a | n/a | | |
| BURKE CORP 1516 SOUTH D AVE NEVADA, IA 50201 | 1916900155 | | | no | 1 | |
| CENTRAL IOWA TRADE SERVICE 101 WATER STREET CAMBRIDGE, IA 50046 | 19169C0020 | | n/a | n/a | | |
| CITY OF AMES - RDF PROCESSING FACILITY 110 CENTER ST AMES, IA 50010 | 1916900123 | 1 | n/a | n/a | | |

| Facility Information (Select Name to Read Report) | Program ID# | Inspections (5 yrs) | Qtrs in Non Compliance (3 yrs) | Current HPV | Informal Enforcement Actions/NOVs (5 yrs) | Formal Enforcement Actions (5 yrs) |
|--|-------------|---------------------|--------------------------------|-------------|---|------------------------------------|
| CITY OF HUXLEY WATER TREATMENT PLANT 1721 315TH ST HUXLEY, IA 50124 | 1916900164 | | | no | 1 | |
| CMBRDGE-ALLEMAN COOP NO STREET ADDRESS CAMBRIDGE, IA 50046 | 1916900082 | | n/a | n/a | | |
| COATING MACHINERY SYSTEMS INC 302 CAMPUS DR HUXLEY, IA 50124 | 1916900141 | | n/a | n/a | | |
| COLORBIOTICS - A BECKER UNDERWOOD CO 1725 DAYTON AVE AMES, IA 50010 | 1916900160 | | | no | | |
| CY-RIDE 1700 W 6TH ST AMES, IA 50010 | 1916900017 | | n/a | n/a | | |
| DAWSON ELEVATOR CO. 1000 E NEVADA, IA 50201 | 1916900021 | | n/a | n/a | | |
| DENT DOCTOR COLLISON REPAIR 535 S DUFF AVENUE AMES, IA 50010 | 19169C0010 | | n/a | n/a | | |
| DON & SONS BODY SHOP INC 1003 E LINCOLN WAY AVENUE AMES, IA 50010 | 19169C0007 | | n/a | n/a | | |
| DSM NUTRITION PRODUCTS INC 616 DAYTON AVE AMES, IA 50010 | 1916900110 | | n/a | n/a | | |
| E&P AUTOMOTIVE D/B/A TUFFY AUTO SERVICE 814 S DUFF AMES, IA 50010 | 19169C0019 | | n/a | n/a | | |
| ETREMA PRODUCTS INC 2500 N LOOP DRIVE AMES, IA 50010 | 19169C0021 | | n/a | n/a | | |
| ETREMA PRODUCTS INC (EDGE TECHNOLOGIES) 2500 N LOOP DR AMES, IA 50010 | 1916900136 | 2 | | no | | |
| EVANS UPHOLSTERING 704 E LINCOLN WAY AMES, IA 50010 | 19169C0002 | | n/a | n/a | | |
| FERNALD GRAIN CO INC NO STREET ADDRESS FERNALD, IA 50201 | 1916900095 | | n/a | n/a | | |
| GILBERT F.GRAIN COOP NO STREET ADDRESS GILBERT, IA 50105 | 1916900096 | | n/a | n/a | | |
| HACH CO 100 DAYTON AVE AMES, IA 50010 | 1916900060 | 1 | | no | | |
| HALLETT MATERIALS 2100 S DAYTON RD AMES, IA 50010 | 1916900127 | 1 | | no | 2 | |
| HEART OF IOWA COOP 229 E ASH ROLAND, IA 50236 | 1916900052 | | n/a | n/a | | |
| HEART OF IOWA COOPERATIVE - NEVADA 22703 600TH AVE NEVADA, IA 50201 | 1916900161 | | n/a | n/a | | |
| HEART OF IOWA COOPERATIVE - STORY CITY 633 MARKET AVE STORY CITY, IA 50248 | 1916900098 | | n/a | n/a | | |
| HEARTLAND COOP 417 2ND ST COLO, IA 50056 | 1916900099 | 1 | n/a | n/a | | |
| HICKORY PARK INC 1404 S DUFF AVE AMES, IA 50010 | 1916900135 | | n/a | n/a | | |
| IDEAL BEVERAGE TRUCKS & BODIES INC 2108 E LINCOLNWAY AMES, IA 50010 | 1916900124 | | | no | | |

| Facility Information (Select Name to Read Report) | Program ID# | Inspections (5 yrs) | Qtrs in Non Compliance (3 yrs) | Current HPV | Informal Enforcement Actions/NOVs (5 yrs) | Formal Enforcement Actions (5 yrs) |
|---|-------------|---------------------|--------------------------------|-------------|---|------------------------------------|
| INDUSTRIAL PLATING CO INC 212 HIGH AVE AMES, IA 50010 | 1916900132 | 0 | n/a | n/a | | 0 |
| IOWA CONCRETE BLOCK 811 SOUTH DUFF AMES, IA 50010 | 1916900081 | 0 | n/a | n/a | | 0 |
| IOWA DEPARTMENT OF TRANSPORTATION 800 LINCOLN WAY AMES, IA 50010 | 1916900121 | 2 | 1 | no | 2 | 0 |
| IOWA STATE READY MIX INC 1435 8TH ST NEVADA, IA 50201 | 1916900149 | 1 | n/a | n/a | 1 | 0 |
| IOWA STATE READY MIX INC 1109 E LINCOLN WAY AMES, IA 50010 | 1916900159 | | | no | | 0 |
| IOWA STATE UNIVERSITY 118 AGRONOMY LAB AMES, IA 50011 | 19169C0001 | 0 | n/a | n/a | | 0 |
| IOWA STATE UNIVERSITY - BECON FACILITY 1521 W F AVE NEVADA, IA 50201 | 1916900140 | 0 | n/a | n/a | | 0 |
| IOWA STATE UNIVERSITY-POWER PLANT/MAIN CAMPUS/LIDIF.- IOWA STATE UNIV AMES, IA 50011 | 1916900080 | 3 | 3 | no | 3 | 0 |
| JACKSON CONSTRUCTION P.O. BOX 209 NEVADA, IA 50201 | 1916900078 | 0 | n/a | n/a | | 0 |
| LARRYS APPLIANCE SERVICE 504 E LINCOLNWAY AMES, IA 50010 | 19169C0006 | 0 | n/a | n/a | | 0 |
| LIGHTHOUSE ELECTRIC 900 HUBBEL STREET KELLEY, IA 50134 | 19169C0017 | 0 | n/a | n/a | | 0 |
| LINCOLNWAY ENERGY LLC 59511 W LINCOLN HWY NEVADA, IA 50201 | 1916900153 | P | 11 | yes | 15 | 0 |
| M H EBY INC 1708 EBY DR STORY CITY, IA 50248 | 1916900157 | 1 | 2 | no | 2 | 0 |
| MANATT'S INC 520 E 1ST ST HUXLEY, IA 50124 | 1916900022 | 1 | n/a | n/a | 1 | 0 |
| MANATT'S INC - AMES 927 DAYTON AVE - PO BOX 785 AMES, IA 50010 | 1916900117 | 1 | 12 | no | 1 | 0 |
| MARTIN MARIETTA MATERIALS INC - AMES 831 RIVERSIDE DR AMES, IA 50010 | 1916900150 | 2 | 12 | no | 3 | 2 |
| MARY GREELEY MEDICAL CENTER 117 ELEVENTH ST AMES, IA 50010 | 1916900083 | 0 | n/a | n/a | | 0 |
| MATHISON AUTO BODY & PAINT 923 N 4TH STREET AMES, IA 50010 | 19169C0012 | 0 | n/a | n/a | | 0 |
| MIKE LOUIS BODY & PAINT INC 1901 E LINCOLN WAY AMES, IA 50010 | 19169C0009 | 0 | n/a | n/a | | 0 |
| MONSANTO CO (ASGROW) 1203A AIRPORT RD AMES, IA 50010 | 1916900144 | 0 | n/a | n/a | | 0 |
| MONSANTO CO - HUXLEY 56411 HWY 210 HUXLEY, IA 50124 | 1916900145 | 0 | n/a | n/a | | 0 |
| NEVADA WATER TREATMENT PLANT 1231 W LINCOLN HWY NEVADA, IA 50201 | 1916900158 | | | no | | 0 |
| PENSKE AUTO CENTER INC 1405 BUCKEYE AVENUE AMES, IA 50010 | 19169C0014 | 0 | n/a | n/a | | 0 |
| PET MEDICAL CENTER OF AMES 1416 S DUFF AVE AMES, IA 50010 | 1916900119 | 0 | n/a | n/a | | 0 |

| Facility Information (Select Name to Read Report) | Program ID# | Inspections (5 yrs) | Qtrs in Non Compliance (3 yrs) | Current HPV | Informal Enforcement Actions/NOVs (5 yrs) | Formal Enforcement Actions (5 yrs) |
|---|-------------|---------------------|--------------------------------|-------------|---|------------------------------------|
| <u>PRIORITY ENVELOPE INC</u> 857 W 18TH ST NEVADA, IA 50201 | 1916900165 | 1 | n/a | n/a | 1 | 1 |
| <u>QWEST COMMUNICATIONS - AMES (5TH ST)</u> 510 - 512 5TH ST AMES, IA 50010 | 1916900146 | 2 | | no | 1 | 1 |
| <u>RECORD PRINTING CO INC</u> 120 INDUSTRIAL PARK RD STORY CITY, IA 50248 | 1916900152 | | | no | | 1 |
| <u>SARGEANT METAL FABRICATING</u> 650 ARRASMITH TRAIL AMES, IA 50010 | 1916900130 | 1 | 2 | no | 1 | 1 |
| <u>SAUER DANFOSS INC</u> 2800 E 13TH STREET AMES, IA 50010 | 19169C0015 | 1 | n/a | n/a | | 1 |
| <u>SAUER-DANFOSS INC</u> 2800 E 13TH ST AMES, IA 50010 | 1916900018 | 1 | 7 | no | 1 | 1 |
| <u>SHIPLEY GRAIN CO</u> NO STREET ADDRESS SHIPLEY, IA 50201 | 1916900097 | | n/a | n/a | | 1 |
| <u>SIGLER COMPANIES</u> 3100 S RIVERSIDE DR AMES, IA 50010 | 1916900163 | 1 | n/a | n/a | 1 | 1 |
| <u>SIGNATURE REAL ESTATE</u> 614 N US HIGHWAY 69 HUXLEY, IA 50124 | 19169C0016 | 1 | n/a | n/a | | 1 |
| <u>STORY CITY MUNICIPAL ELECTRIC UTILITY</u> 505 MARKET ST STORY CITY, IA 50248 | 1916900090 | 2 | 6 | no | 1 | 1 |
| <u>THOMPSON AUTO PARTS</u> 955 MAIN STREET MCCALLSBURG, IA 50154 | 19169C0003 | 1 | n/a | n/a | | 1 |
| <u>TOP SHELF CABINETRY</u> 1220 6TH ST NEVADA, IA 50201 | 1916900156 | 1 | n/a | n/a | 1 | 1 |
| <u>UNIVERSAL HARVESTER CO INC</u> 101 DAYTON AVE AMES, IA 50010 | 1916900122 | 1 | | no | | 1 |
| <u>USDA-NATIONAL ANIMAL DISEASE CENTER</u> 2300 DAYTON AVE AMES, IA 50010 | 1916900087 | 3 | 1 | no | 2 | 4 |
| <u>USDA-NATIONAL VETERINARY SERVICES LAB</u> 1800 DAYTON AVE AMES, IA 50010 | 1916900128 | 2 | 1 | no | 3 | 1 |
| <u>VISIONAIRE CORP</u> 1 VISIONAIRE PL AMES, IA 50010 | 1916900137 | | | no | | 1 |
| <u>WAL MART STORES INC</u> 305 AIRPORT ROAD AMES, IA 50010 | 19169C0013 | 1 | n/a | n/a | | 1 |
| <u>WAYNE LARSON COLLISION REPAIR SPECIALIST</u> 2017 E LINCOLN WAY AMES, IA 50010 | 19169C0008 | 1 | n/a | n/a | | 1 |
| <u>WILSON OLDS CADILLAC COMPANY</u> 2212 S DUFF AMES, IA 50010 | 19169C0011 | 1 | n/a | n/a | | 1 |
| <u>3M AMES</u> 900 DAYTON AVE AMES, IA 50010 | 1916900100 | 1 | | no | 1 | 1 |
| <u>3M COMPANY</u> 900 DAYTON AVENUE AMES, IA 50010 | 19169C0018 | 1 | n/a | n/a | | 1 |



Report Generated on 9/18/2009

Search Criteria

Facility Characteristics

Designation: MAJOR, MINOR, FEDREP_MINOR, SYNTHETIC_MINOR

Geographic Location

| | |
|------------------------|---------------|
| Facility Status: O,T,I | County: IA169 |
|------------------------|---------------|

Compliance Information

| |
|---|
| Compliance Status: HPV, IN_VIOLATION, ON_SCHEDULE, UNKNOWN, IN_COMPLIANCE |
|---|

Restrict by Media

| |
|----------------------------|
| Restrictions By Media: AFS |
|----------------------------|

[return to top](#)**Notes:**

- Chemical releases reported by TRI are not associated with non-compliance for that facility.
- The Demographics data (Percent Minority and Population Density) are displayed on the first row in each facilities data table. This data is not specific to that permit but to the whole facility.

Definitions:

AFS- Air Facility System for Clean Air Act programs.

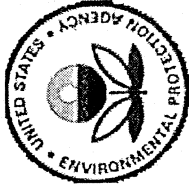
FRS- Facility Registry System.

PCS- Permit Compliance System for Clean Water Act programs monitoring National Pollutant Discharge Elimination System (NPDES) permits.

RCRA- Resource Conservation and Recovery Act waste handler database (RCRAInfo).

TRI- Toxics Release Inventory for Emergency Planning and Community Right-to-Know Act, Section 313 submissions.

ICIS- Integrated Compliance Information System



Enforcement & Compliance History Online (ECHO)

You are here: [EPA Home](#) [Compliance and Enforcement](#) [ECHO](#) [Search Data](#) [Search Results](#)



Detailed Facility Report

For Public Release - Unrestricted Dissemination Report Generated on 09/24/2009
 US Environmental Protection Agency - Office of Enforcement and Compliance Assurance
Facility Permits and Identifiers

| Statute | System | Source ID | Facility Name | Street Address | City | State | Zip |
|---------|--------|------------------|-----------------------|----------------------------|--------|-------|-------|
| | FRS | 110024891027 | LINCOLNWAY ENERGY LLC | 59511 WEST LINCOLN HWY | NEVADA | IA | 50201 |
| CAA | AFS | 1916900153 | LINCOLNWAY ENERGY LLC | 59511 W LINCOLN HWY | NEVADA | IA | 50201 |
| CWA | PCS | IA0079375 | | 59511 WEST LINCOLN HIGHWAY | NEVADA | IA | 50201 |
| EP313 | TRI | 50201LNCLIN59511 | LINCOLNWAY ENERGY LLC | 59511 LINCOLN HWY | NEVADA | IA | 50201 |

Facility Characteristics

| Statute | Source ID | Universe | Status | Areas | Permit Expiration Date | Latitude/ Longitude | Indian Country? | SIC Codes | NAICS Codes |
|---------|--------------|-------------------|-----------|------------------------------|------------------------|--------------------------------|-----------------|-----------|-------------|
| | 110024891027 | | | | | LRT: 42.026111 , -93.509167 | No | | |
| CAA | 1916900153 | Major (Fed. Rep.) | Operating | TITLE V PERMITS , SIP , NSPS | | | NA | 2869 | |
| CWA | IA0079375 | Mnor | Active | | 04/16/2011 | 42.0261 , -93.5092 | No | | |

If the CWA permit is past its expiration date, this normally means that the permitting authority has not yet issued a new permit. In these situations, the expired permit is normally administratively extended and kept in effect until the new permit is issued.

For the RCRA program, activities that contribute to an overall facility status of Active are displayed in parentheses using the acronym HPACS, where H indicates handler activities, P - permitting, A - corrective action, C - converter, and S - state-specific. More information is available in the Data Dictionary.

Inspection and Enforcement Summary Data

| Statute | Source ID | Insp. Last 05Yrs | Date of Last Inspection | Formal Enf Act Last 05 Yrs | Penalties Last 05 Yrs |
|---------|------------|------------------|-------------------------|----------------------------|-----------------------|
| CAA | 1916900153 | 0 | Never | 0 | \$00 |
| CWA | IA0079375 | 3 | 11/25/2008 | 0 | \$00 |

Compliance Monitoring History (05 years)

Data Dictionary

| Statute | Source ID | Inspection Type | Lead Agency | Date | Finding |
|---------|------------|--------------------------------------|-------------|------------|--|
| CAA | 1916900153 | STATE PCE/OFF-SITE | State | 09/18/2006 | |
| CAA | 1916900153 | ON-SITE PCE OBSERVATION (STATE) | State | 10/31/2006 | |
| CAA | 1916900153 | ON-SITE PCE OBSERVATION (STATE) | State | 10/31/2006 | |
| CAA | 1916900153 | ON-SITE PCE OBSERVATION (STATE) | State | 10/31/2006 | |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/12/2006 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/12/2006 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/12/2006 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/12/2006 | Result=STACK TEST FAILED ; Pollutant=NO2 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/13/2006 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/20/2006 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/20/2006 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/20/2006 | Result=STACK TEST FAILED ; Pollutant=VOC |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/20/2006 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | STATE PCE/OFF-SITE | State | 04/03/2007 | |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 06/13/2007 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 06/13/2007 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/19/2007 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/19/2007 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/20/2007 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/20/2007 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 05/01/2008 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 05/01/2008 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/04/2008 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/04/2008 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/09/2008 | Result=STACK TEST FAILED ; Pollutant=ACEHY |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/09/2008 | Result=STACK TEST FAILED ; Pollutant=THAP |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/06/2008 | Result=STACK TEST FAILED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/06/2008 | Result=STACK TEST FAILED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/02/2008 | Result=STACK TEST PASSED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/02/2008 | Result=STACK TEST PASSED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/02/2008 | Result=STACK TEST PASSED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/02/2008 | Result=STACK TEST PASSED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=PM10 |

| | | | | | |
|-----|------------|--------------------------------------|-------|------------|--|
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=VOC |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=ACEHY |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=ACRLE |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=FORM |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=MTNOL |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=THAP |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/03/2008 | Result=STACK TEST PASSED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/04/2008 | Result=STACK TEST PASSED ; Pollutant=NO2 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/04/2008 | Result=STACK TEST PASSED ; Pollutant=CO |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/05/2008 | Result=STACK TEST PASSED ; Pollutant=SO2 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/05/2008 | Result=STACK TEST PASSED ; Pollutant=PT |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 12/05/2008 | Result=STACK TEST PASSED ; Pollutant=PM10 |
| CAA | 1916900153 | OWNER/OPERATOR-CONDUCTED SOURCE TEST | State | 01/17/2009 | Result=STACK TEST PASSED ; Pollutant=PT |
| CWA | IA0079375 | COMPLIANCE SAMPLING | State | 11/15/2006 | |
| CWA | IA0079375 | COMPLIANCE EVAL (NON-SAMPLING) | State | 11/13/2007 | |
| CWA | IA0079375 | COMPLIANCE SAMPLING | State | 11/25/2008 | |

Entries in *italics* are not considered inspections in official counts.

Compliance Summary Data

Information on the nature of alleged violations is available on the FAQ page.

| Statute | Source ID | Current SNC/HPV? | Description | Current As Of | Qtrs in NC (of 12) |
|---------|------------|------------------|---|---------------|--------------------|
| CAA | 1916900153 | YES | VIOLATION ADDRESSED; STATE HAS LEAD ENFORCEMENT | 08/15/2009 | 11 |
| CWA | IA0079375 | N/A | | Jan-Mar09 | 7 |

Data Dictionary

Three Year Compliance Status by Quarter

Violations shown in a given quarter do not necessarily span the entire 3 months. Information on the nature of alleged violations is available on the FAQ page, and information on the duration of non-compliance is available at the end of this report.

Data Dictionary

| Statute:Source ID CAA: 1916900153 HPV History | AIR Compliance Status | | | | | | | | | | | |
|---|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| | QTR1 Oct-Dec06 | QTR2 Jan-Mar07 | QTR3 Apr-Jun07 | QTR4 Jul-Sep07 | QTR5 Oct-Dec07 | QTR6 Jan-Mar08 | QTR7 Apr-Jun08 | QTR8 Jul-Sep08 | QTR9 Oct-Dec08 | QTR10 Jan-Mar09 | QTR11 Apr-Jun09 | QTR12 Jul-Sep09 |
| Program/Pollutant in Current Violation | | | | | | | | | | | | |
| TITLE V PERMITS | | | | | | | | | | | | |
| SIP | C-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED | V-PROCED |
| CARBON MONOXIDE | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|-----------|
| NITROGEN DIOXIDE | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED | |
| PARTICULATE MATTER < 10 UM | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |
| TOTAL PARTICULATE MATTER | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |
| VOLATILE ORGANIC COMPOUNDS | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |
| NSPS | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |
| NITROGEN DIOXIDE | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |
| TOTAL PARTICULATE MATTER | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |
| VOLATILE ORGANIC COMPOUNDS | | | | | | | | | | | | | | | | | | | | | | | | V-PROCEED |

High Priority Violator (HPV) History section: "Unaddr" means the facility has not yet been addressed with a formal enforcement action. "Addr" means the facility has been addressed with a formal enforcement action, but its violations have not been resolved. Lead Agency designated can be US EPA, State, Both, or No Lead Determined. If HPV History is blank, then the facility was not a High Priority Violator.

C=Compliance; V=Violation; S=Compliance Schedule.

CWA/NPDES Compliance Status

| Statute:Source ID | QTR1 | QTR2 | QTR3 | QTR4 | QTR5 | QTR6 | QTR7 | QTR8 | QTR9 | QTR10 | QTR11 | QTR12 |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| CWA:IA0079375 | Apr-Jun06 | Jul-Sep06 | Oct-Dec06 | Jan-Mar07 | Apr-Jun07 | Jul-Sep07 | Oct-Dec07 | Jan-Mar08 | Apr-Jun08 | Jul-Sep08 | Oct-Dec08 | Jan-Mar09 |
| Non-compliance in Quarter | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SNC/RNC Status » | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Effluent Violations by NPDES Parameter: Get violation charts: all violations custom (click on parameter names for individual parameter charts)

Discharge point:001

| PH | NMth | 129% | 378% | 344% | 626% | 44% | 173% |
|---------------------------------|-------|------|------|------|------|-----|------|
| SOLIDS, TOTAL SUSPENDED | Mthly | 47% | 71% | 53% | 5% | 47% | |
| IRON, TOTAL (AS FE) | Mthly | 118% | 296% | 116% | | | |
| CHLORINE, TOTAL RESIDUAL | Mthly | | | | | | |

Effluent violations are displayed as highest percentage by which the permit limit was exceeded for the quarter. **Bold, large** print indicates Significant Non-compliance (SNC) effluent violations. **Shaded boxes** indicate unresolved SNC violations.

Notices of Violation or Informal Enforcement - AFS, PCS, ICIS-NPDES, RCRAInfo (05 year history)

Data Dictionary

| Statute | Source ID | Type of Action | Lead Agency | Date |
|---------|------------|------------------|-------------|------------|
| CAA | 1916900153 | STATE NOV ISSUED | State | 02/09/2007 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 03/22/2007 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 04/03/2007 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 06/06/2007 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 08/23/2007 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 02/20/2008 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 03/10/2008 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 04/18/2008 |
| CAA | 1916900153 | STATE NOV ISSUED | State | 06/12/2008 |

| | | | | | |
|-----|------------|------------------|-------|------------|--|
| CAA | 1916900153 | STATE NOV ISSUED | State | 06/16/2008 | |
| CAA | 1916900153 | STATE NOV ISSUED | State | 07/10/2008 | |
| CAA | 1916900153 | STATE NOV ISSUED | State | 07/15/2008 | |
| CAA | 1916900153 | STATE NOV ISSUED | State | 03/12/2009 | |
| CAA | 1916900153 | STATE NOV ISSUED | State | 03/31/2009 | |
| CAA | 1916900153 | STATE NOV ISSUED | State | 04/09/2009 | |

Formal Enforcement Actions - (05 year history)

AFS, PCS, RCRAInfo, NCDB

| Statute | Source ID | Type of Action | Lead Agency | Date | Penalty | Penalty Description |
|-----------------------------|-----------|----------------|-------------|------|---------|---------------------|
| - No data records returned. | | | | | | |

In some cases, formal enforcement actions may be entered both at the initiation and final stages of the action. These may appear more than once above. Entries in *italics* are not "normal" actions under the PCS definitions but are either the initiation of an action or penalties assessed as a result of a previous action. This section includes US EPA and State formal enforcement actions under CAA, CWA and RCRA.

ICIS

| Primary Law/Section | Case Number | Case Type | Lead Agency | Case Name | Issued/Filed Date | Settlement Date | Federal Penalty | State/Local Penalty | SEP Cost | Comp Action Cost |
|-----------------------------|-------------|-----------|-------------|-----------|-------------------|-----------------|-----------------|---------------------|----------|------------------|
| - No data records returned. | | | | | | | | | | |

Federal enforcement actions and penalties shown in this section are from the Integrated Compliance Information System (ICIS-FE&C). These actions may duplicate records in the Formal Enforcement Actions section.

Demographic Profile of Surrounding Area (3 Miles)

| | | | | | |
|-----------------|-----|------------|-----|---------------------|-----|
| Radius of Area: | N/A | Land Area: | N/A | Households in area: | N/A |
|-----------------|-----|------------|-----|---------------------|-----|

- No data records returned.

Please note: Entries in gray denote records that are not federally required to be reported to EPA. These data may not be reliable.

Notice About Duration of Violations -- The duration of violations shown on this report is an estimate of the actual duration of the violations that might be alleged or later determined in a legal proceeding. For example, the start date of the violation as shown in the ECHO database is normally when the government first became aware of the violation, not the first date that the violation occurred, and the facility may have corrected the violation before the end date shown. In some situations, violations may have been corrected by the facility, but EPA or the State has not verified the correction of these violations. In other situations, EPA does not remove the violation flag until an enforcement action has been resolved.



This report was generated by the Integrated Data for Enforcement Analysis (IDEA) system, which updates its information from program databases monthly. The data were last updated: AFS: 08/15/2009. PCS: 08/13/2009. FRS: 08/13/2009. TRI: 05/05/2009. ICIS: 08/15/2009.

Some regulated facilities have expressed an interest in explaining data shown in the Detailed Facility Reports in ECHO. Please check company web sites for such explanations.

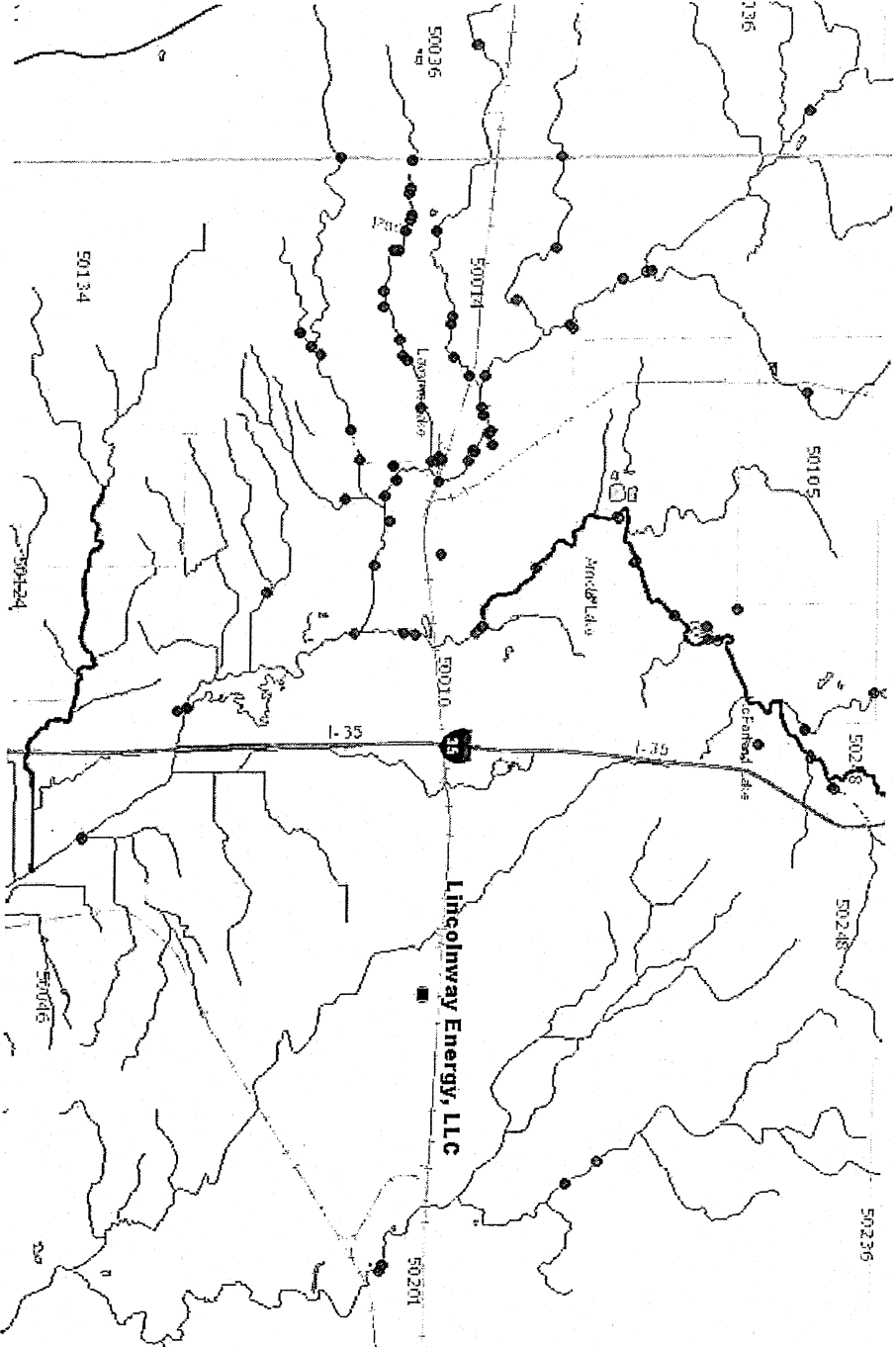
[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

Appendix D
IMPAIRED WATERWAYS, WATERSHED PLAN

Lincolnway Energy - Impaired Waters Map Query

Map Contents

- Water Quality
- Impaired Waters Point
- Assessed Waters Point
- Water Quality Standards Point
- Beaches Point
- Combined Sewer Overflow Point
- Clean Watersheds Needs Survey Point
- Fish Consumption Advisories Point
- Clean Water State Revolving Fund Point
- Impaired Waters Line
- Assessed Waters Line
- Water Quality Standards Line
- Beaches Line
- Combined Sewer Overflow Line
- No Discharge Zone (NDZ) Line
- Fish Consumption Advisories Line
- Impaired Waters Poly
- Assessed Waters Poly
- Water Quality Standards Poly
- Beaches Poly
- Combined Sewer Overflow Poly
- No Discharge Zone (NDZ) Poly
- Fish Consumption Advisories Poly
- Facility Registry
- EPA Water Monitoring Stations
- Water Monitoring Stations (STORET)





http://iaspub.epa.gov/tmdl_waters10/huc_rept.control?p_huc=07080105&p_huc_desc=SOUTH%20SKUNK
Last updated on Thursday, September 24th, 2009.

Total Maximum Daily Loads

You are here: [EPA Home](#) [Water](#) [Wetlands, Oceans, Watersheds](#) [TMDLs](#) [TMDL Reports](#)

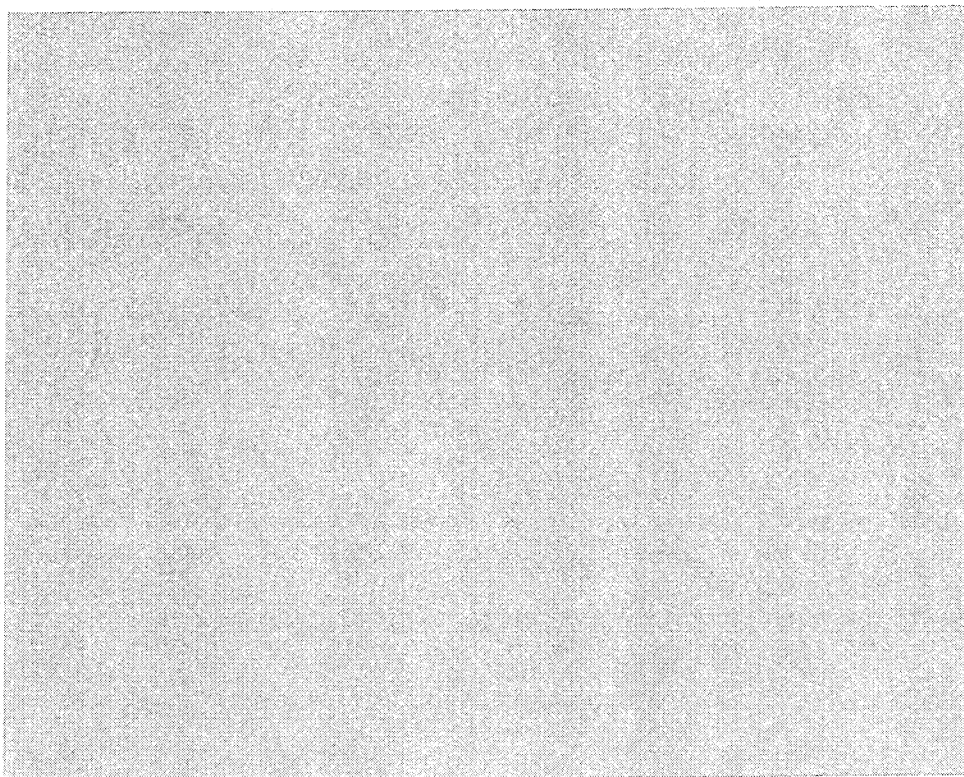
Section 303(d) List Fact Sheet for Watershed SOUTH SKUNK

- [Number of Waters listed by State](#)
- [Waters Listed by Waterbody](#)
- [Causes of Impairment](#)
- [Approved TMDLs by Pollutant](#)
- [Approved TMDLs by Year](#)
- [TMDL Document Search](#)

Other Impaired Water 303(d) List Information

Data are also available for these years:

Click [here](#) to see metadata for this report.



Click on the map above for an interactive Enviromapper session!

Number of Waters listed by State for Watershed

| State Name | Waters on List | Effective Listing Cycle |
|------------|----------------|-------------------------|
| IOWA | 6 | 2006 |

Total Number of Waters Listed: 6

Waters Listed By Waterbody

NOTE: Click on the underlined "Waters on List" value to see a listing of those waters.

| Waterbody Name | Waterbody Type | Waters on List |
|----------------|----------------|----------------|
|----------------|----------------|----------------|

| | | |
|----------------------------------|---------------------|----------|
| BALLARD CREEK | NOT REPORTED | <u>1</u> |
| LONG DICK CREEK | STREAM/CREEK /RIVER | <u>1</u> |
| SOUTH SKUNK RIVER | NOT REPORTED | <u>2</u> |
| WALNUT CREEK | STREAM/CREEK /RIVER | <u>1</u> |
| WHITE OAK CONSERVATION AREA LAKE | NOT REPORTED | <u>1</u> |

Total Number of Listed Waters: 6

Causes of Impairment

NOTE: Click on the underlined "Causes of Impairment Reported" value to see a listing of those waters with the impairment.

| Impairment Name | Causes of Impairment Reported | Percent of Reported |
|---------------------------|-------------------------------|---------------------|
| BIOLOGICAL | <u>2</u> | 22.22 |
| ORGANIC ENRICHMENT/LOW DO | <u>1</u> | 11.11 |
| ATRAZINE | <u>1</u> | 11.11 |
| BACTERIA | <u>1</u> | 11.11 |
| PH | <u>1</u> | 11.11 |
| TURBIDITY | <u>1</u> | 11.11 |
| AMMONIA | <u>1</u> | 11.11 |
| NITRATE | <u>1</u> | 11.11 |

Total Number of Causes of Impairment Reported: 9

Approved TMDLs by Pollutants since October 1, 1995

NOTE: Click on the underlined "Pollutant" value to see associated listed waters for which a TMDL was developed. Click on the underlined "Number of TMDLs Approved" value to see a listing of those approved TMDLs for the pollutant. EPA is in the process of collecting TMDL information from the states. Because these efforts are on-going, there may be additional approved TMDLs that were not included in the listings below.

| Pollutant | Number of TMDLs Approved | Percent of Reported |
|-----------|--------------------------|---------------------|
| SILTATION | <u>1</u> | 33.33 |
| TURBIDITY | <u>1</u> | 33.33 |
| ALGAE | <u>1</u> | 33.33 |

Total Number of Approved TMDLs since October 1, 1995: 3

Approved TMDLs by EPA Fiscal Year (October 1 through September 30) since October 1, 1995

| Fiscal Year | Number of TMDLs Approved | Percent Approved |
|-------------|--------------------------|------------------|
| 2003 | <u>1</u> | 33.33 |
| 2006 | <u>2</u> | 66.67 |

Appendix E
WATER SUPPLY QUALITY

CONSUMER CONFIDENCE REPORT NOTIFICATION

The Consumer Confidence Report will be mailed to customers this year with the June, 2008 water bill. If you would like an additional copy of the Consumer Confidence Report you may stop by the Nevada City Hall at 1209 6th Street and request a copy. The City of Nevada Water Department used results of water analysis from 2004 through 2007 to fill out this report. THERE WERE NO VIOLATIONS ON THE CITY OF NEVADA'S CONSUMER CONFIDENCE REPORT.

2007 WATER QUALITY REPORT FOR The City of Nevada, IA

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the alluvial aquifer(s).

Our water quality testing shows the following results:

| CONTAMINANT | MCLG | MCL | DETECTED LEVEL | DATE SAMPLED | RANGE OF DETECTION | VIOLATION | SOURCE |
|---------------------------------------|------|--------|----------------|-----------------------|--------------------|-----------|---|
| Barium (ppm) | 2 | 2 | 0.21 | 7/6/2004 | N/A | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Copper (ppm) | 1.3 | AL=1.3 | 0 | 6/28/2007 - 7/25/2007 | ND - 0.06 | No | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Fluoride (ppm) | 4 | 4 | 1.68 | 1/1/2007- 12/31/2007 | 0.96 – 1.68 | No | Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories |
| Lead (ppb) | 0 | AL=15 | 0 | 6/28/07- 7/25/07 | ND - 2 | No | Corrosion of household plumbing systems; erosion of natural deposits |
| TTHM (ppb) [Total trihalomethanes] | N/A | 80 | 13 | 7/31/2006 | N/A | No | By-products of drinking water chlorination |
| Sodium (ppm) | N/A | N/A | 16 | 4/11/2005 | N/A | No | Erosion of natural deposits; Added to water during treatment process |
| Nitrate [as N] (ppm) | 10 | 10 | <0.01 | 1/16/2007 | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Chlorine | 4 | 4 | 0.84 | 1/1/2007 - 12/31/2007 | 0.35 – 1.79 | No | By-products of drinking water chlorination |

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG) -- The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- ppb -- parts per billion.
- ppm -- parts per million.
- N/A -- Not applicable
- ND -- Not detected
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

GENERAL INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Nevada is responsible for providing high quality drinking water, but can not control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

CONTAMINANT VIOLATIONS

None

ADDITIONAL HEALTH INFORMATION

None

OTHER VIOLATIONS

None

SOURCE WATER ASSESSMENT INFORMATION

The City of Nevada obtains its water from an alluvial aquifer. The alluvial aquifer was determined to be highly susceptible to contamination because of the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The City of Nevada wells will be the most susceptible to activities such as industrial sites, and air release permitted sites. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from the Nevada Water Department at (515) 382-2074.

CONTACT INFORMATION

For questions regarding this information, please contact Ryan Porath or Shawn Ludwig at (515) 382-2074 during the following hours: 7:30 a.m. to 4:00 p.m. Monday through Friday. Decisions regarding the water system are made at the Nevada City Council Meetings held on the second and fourth Mondays of the month at 5:30 p.m. at city hall and are open to the public

Este informe contiene informacion muy importante sobre su aqua bebar. Traduzcalo o hable con alguien que lo entienda bien.

Appendix F
STORMWATER



RECEIVED
APR 20 2006

STATE OF IOWA

BY:

THOMAS J. VILSACK, GOVERNOR
SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

April 17, 2006

Rick Brehm, President/CEO
Lincolnway Energy, LLC
975 West Lincoln Highway, Suite B
Nevada, Iowa 50201

RE: Final NPDES Permit
Permit Number: 85-62-1-00

Dear Mr. Brehm,

Enclosed please find the final NPDES permit for your wastewater discharge. The issued permit contains identical conditions to those specified in the draft permit mailed March 14, 2006, except that on page 2 of the permit the stream designation description has been removed. This change is in response to new Water Quality Standards that became effective on March 22, 2006.

According to state rules, West Indian Creek is now designated as Class A1, B(WW-2), instead of Class B(LR). The changes in our Water Quality Standards have not been approved by the Environmental Protection Agency (EPA) and; therefore, cannot legally be incorporated into the NPDES permit until such approval is received. As such, the description of the stream designation has been removed. It should be noted that the change in stream designation and the removal of its description in the NPDES permit in no way affects the current limits or requirements established in this issued permit.

If you have any questions, please contact me at 515/242-6148 or at john.warren@dnr.state.ia.us.

Sincerely,

John Warren
NPDES Section

Enclosure: Final Permit

Cc. Field Office #5
EPA Region 7
Keith Scarberry, ICM, 310 North First Street, P.O. Box 397, Colwich, KS 67030

IOWA DEPARTMENT OF NATURAL RESOURCES
National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS

LINCOLNWAY ENERGY, LLC
975 WEST LINCOLN HIGHWAY, SUITE B
NEVADA, IA 50201 -

FACILITY NAME AND ADDRESS

LINCOLNWAY ENERGY, LLC
4231 WEST LINCOLNWAY
NEVADA, IA 50201 -

Section 3, T 83N, R 23W
STORY County

IOWA NPDES PERMIT NUMBER: 8562100

DATE OF ISSUANCE: 4/17/2006

DATE OF EXPIRATION: 4/16/2011

**YOU ARE REQUIRED TO FILE FOR
RENEWAL OF THIS PERMIT BY:** 10/18/2010

EPA NUMBER: IA0079375

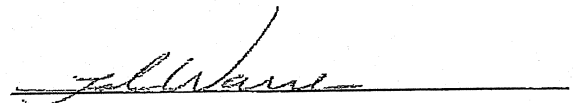
This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C 1342(b)), Iowa Code section 455B.174, and rule 567--64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

You may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of this department within 30 days of your receipt of this permit.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By



John Warren
NPDES Section
ENVIRONMENTAL SERVICES DIVISION

Facility Name: LINCOLNWAY ENERGY, LLC

Permit Number: 8562100

| Outfall Number | Outfall Description |
|----------------|---|
| 001 | DISCHARGE CONSISTS OF REVERSE OSMOSIS REJECT WATER, COOLING TOWER BLOWDOWN, WATER SOFTENER REGENERANT, AND OPTIONAL DISCHARGE OF DECANT FROM FILTER BACKWASH. |

Receiving Stream: WEST INDIAN CREEK

Route of Flow: STORM SEWER TO WEST INDIAN CREEK

Facility Name: LINCOLNWAY ENERGY, LLC

Permit Number: 8562100

Effluent Limitations

Outfall No.: 001 DISCHARGE CONSISTS OF REVERSE OSMOSIS REJECT WATER, COOLING TOWER BLOWDOWN, WATER SOFTENER REGENERANT, AND OPTIONAL DISCHARGE OF DECANT FROM FILTER BACKWASH.

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

| Wastewater Parameter | Season | Type of Limit | % Removal | EFFLUENT LIMITATIONS | | | | | |
|--------------------------|--------|---------------|-----------|----------------------|----------------|---------------|-------|---------------|----------------|
| | | | | Concentration | | | Mass | | |
| | | | | 7 Day Average/Min | 30 Day Average | Daily Maximum | Units | 7 Day Average | 30 Day Average |
| TOTAL SUSPENDED SOLIDS | YEARLY | FINAL | | 30.0 | 45.0 | MG/L | 231.0 | 346.0 | LBS/DAY |
| PH (MINIMUM - MAXIMUM) | YEARLY | FINAL | 6.0 | | 9.0 | STD UNITS | | | |
| CHLORINE, TOTAL RESIDUAL | YEARLY | FINAL | | 0.329 | 0.341 | MG/L | 2.663 | 2.756 | LBS/DAY |
| IRON, TOTAL (AS FE) | YEARLY | FINAL | | 1.02 | 1.02 | MG/L | 8.23 | 8.23 | LBS/DAY |

Facility Name: LINCOLNWAY ENERGY, LLC
 Permit Number: 8562100

Monitoring and Reporting Requirements

- (a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.
- (b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized.
- (c) Chapter 63 of the Iowa Administrative Code provides you with further explanation of your monitoring requirements.
- (d) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. Also, flow data shall be reported in million gallons per day (MGD).
- (e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the department by the fifteenth day following the close of the reporting period. Your reporting period is on a monthly basis, ending on the last day of each reporting period.

| Outfall Number | Wastewater Parameter | Sample Frequency | Sample Type | Monitoring Location |
|----------------|--------------------------|------------------|-------------------|---------------------|
| 001 | FLOW | 7/WEEK OR DAILY | 24 HOUR TOTAL | FINAL EFFLUENT |
| 001 | TOTAL SUSPENDED SOLIDS | 1 TIME PER WEEK | 24 HOUR COMPOSITE | FINAL EFFLUENT |
| 001 | PH (MINIMUM - MAXIMUM) | 1 TIME PER WEEK | GRAB | FINAL EFFLUENT |
| 001 | CHLORINE, TOTAL RESIDUAL | 1 TIME PER WEEK | GRAB | FINAL EFFLUENT |
| 001 | IRON, TOTAL (AS FE) | 1 TIME PER WEEK | 24 HOUR COMPOSITE | FINAL EFFLUENT |
| 001 | SOLIDS, TOTAL DISSOLVED | 1 TIME PER WEEK | 24 HOUR COMPOSITE | FINAL EFFLUENT |
| 001 | TEMPERATURE | 1 TIME PER WEEK | GRAB | FINAL EFFLUENT |

Facility Name: LINCOLNWAY ENERGY, LLC

Permit Number: 8562100

ADDITIONAL OPERATING, MONITORING AND REPORTING REQUIREMENTS

COOLING TOWER OPERATING REQUIREMENTS

You are prohibited from discharging cooling tower blowdown while adding Biotrol 509 for a period of at least six (6) hours following each Biotrol treatment. During this six hour period you must maintain the pH of the water in the cooling tower at 8.0 units or greater.

MONITORING AND REPORTING REQUIREMENTS

1. Notify this department, in writing, within thirty (30) days of the commencement of discharge authorized by this permit. Your written notification must be mailed to the following address:

John Warren
Iowa Department of Natural Resources
Environmental Services Division
NPDES Section
502 East 9th Street
Des Moines, IA 50319

2. In addition to the monitoring requirements specified elsewhere in this permit, no later than nine (9) months from the commencement of discharge authorized under this permit you shall sample, analyze and submit the results of at least one analysis representative of the actual discharge for the parameters listed on Iowa NPDES Permit Application Form 2, Section III and Iowa NPDES Permit Application Form Supplemental Data for TDS and chloride. These forms can be found on the Iowa DNR website at <http://www.iowadnr.com/water/npdes/forms2.html>. The samples you collect and analyze must be 24-hour composite samples, except pH, oil & grease and total residual chlorine, which must be grab samples, of the final effluent on a day when the plant is operating normally. The samples must be collected when the discharge does not contain storm water runoff. The results of these analyses will be evaluated and the department will reopen this permit if it is determined that there is a reasonable potential for the discharge to cause or contribute to a violation of a water quality standard for any of the measured parameters. The completed forms must be mailed to the address shown above.
3. If the measured concentration of total dissolved solids (TDS) is greater than 1,012 mg/L and/or if the chloride concentration is greater than 265 mg/L there is a reasonable potential for your discharge to cause or contribute to a violation of a water quality standard. In this case you must submit the results of a whole effluent toxicity (WET) test, or tests, of a sample of the final effluent in addition to the analytical data required in item 2 above.
4. Depending on the concentrations of TDS and chloride in the discharge an acute and/or chronic WET test may be required.
 - a. If the TDS concentration exceeds 1,012 mg/L and/or the chloride concentration exceeds 875 mg/L you will be required to perform an acute WET test.
 - b. If the TDS concentration exceeds 1,123 mg/L and/or the chloride concentration exceeds 265 mg/L you will be required to perform a chronic WET test.
5. The instructions below shall be followed when performing the acute WET test.
 - a. If acute toxicity testing is required you must have a laboratory certified in Iowa perform an acute toxicity test using both *Ceriodaphnia dubia* (water flea) and *Pimephales promelas* (fathead minnow). The laboratory must conduct the test using the methods specified in USEPA. October 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. Fifth Edition. US Environmental Protection Agency. Office of Water. Washington, D.C. EPA 821-R-02-012.

Facility Name: LINCOLNWAY ENERGY, LLC
Permit Number: 8562100

ADDITIONAL OPERATING, MONITORING AND REPORTING REQUIREMENTS (Continued)

- b. You may conduct either a simple pass/fail test using 98.3% effluent and 1.7% dilution water plus a control or a test using a series of dilutions. If you conduct a pass/fail test you must ensure that the concentrations of TDS and chloride in the sample used for the test are at least as high as the highest expected discharge concentrations. If you conduct a test using a series of dilutions, which is the approach the department encourages, at least one of the dilutions must have concentrations of TDS and chloride higher than the expected discharge concentrations for these parameters.
6. The instructions below shall be followed when performing the chronic WET test.
 - a. If chronic toxicity testing is required you must have a laboratory certified in Iowa perform a chronic toxicity test using both Ceriodaphnia dubia (water flea) and Pimephales promelas (fathead minnow). The laboratory must conduct the test using the methods specified in USEPA, October 2002, *Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms*. Fourth Edition. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., EPA 821-R-02-013.
 - b. You may conduct either a simple pass/fail test using 85.1% effluent and 14.9% dilution water plus a control or a test using a series of dilutions. If you conduct a pass/fail test you must ensure that the concentration of TDS and chloride in the sample used for the test are at least as high as the highest expected discharge concentrations. If you conduct a test using a series of dilutions, which is the approach the department encourages, at least one of the dilutions must have concentrations of TDS and chloride higher than the expected discharge concentrations for these parameters.
7. The following are additional requirements that shall be met as part of performing the acute and/or chronic WET testing.
 - a. The time from sample collection to first use of each sample should not exceed 36 hours and in no case should more than 72 hours elapse between collection and first use of the sample.
 - b. You must analyze the sample used for the toxicity test and report the results to the department for total dissolved solids (TDS), bicarbonate (HCO_3), calcium (Ca), chloride (Cl), carbonate (CO_3), total iron (Fe), magnesium (Mg), nitrate (NO_3), sodium (Na), potassium (K) and sulfate (SO_4).
8. The department will use the toxicity test results to establish permit limits for total dissolved solids as follows:
 - a. If you perform a simple pass/fail acute and/or chronic test using a control and a single effluent dilution a daily maximum permit limit will be established as the concentration of TDS measured in the sample that passes the test(s), that is, the concentration shown by the test(s) to be nontoxic.
 - b. If you perform an acute test using a series of dilutions the LC₅₀ and No Observed Adverse Effect Concentration (NOAEC) values calculated by the laboratory will be used to establish a daily maximum permit limit. The limit will be either the NOAEC concentration for the species with the lowest NOAEC or 1/2 the LC₅₀ concentration for the species with the lowest calculated LC₅₀ and accounting for mixing with a portion of the receiving stream flow.

If you perform a chronic test using a series of dilutions the IC25 and NOAEC values calculated by the laboratory will be used to establish a daily maximum permit limit. The limit will be either the NOAEC concentration for the species with the lowest NOAEC or the IC25 concentration for the species with the lowest IC25.

 - c. Permit limits for specific ions (e.g. Na, Cl, SO_4 , etc.) may be established on a case-by-case basis as necessary to protect the receiving stream for livestock and wildlife watering and other incidental water uses.

Please contact John Warren at 515-242-51648 or by e-mail at john.warren@dmr.state.ia.us should you have any questions concerning the toxicity testing requirements.

STANDARD CONDITIONS

1. DEFINITIONS

(a) 7 day average means the sum of the total daily discharges by mass, volume or concentration during a 7 consecutive day period, divided by the total number of days during the period that measurements were made. Four 7 consecutive day periods shall be used each month to calculate the 7-day average. The first 7-day period shall begin with the first day of the month.

(b) 30 day average means the sum of the total daily discharges by mass, volume or concentration during a calendar month, divided by the total number of days during the month that measurements were made.

(c) daily maximum means the total discharge by mass, volume or concentration during a twenty-four hour period.

2. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility.

{See 40 CFR 122.41(a) and 567-64.7(4)(e) IAC}

3. DUTY TO REAPPLY

If you wish to continue to discharge after the expiration date of this permit you must file an application for reissuance at least 180 days prior to the expiration date of this permit.

{See 567-64.8(1) IAC}

4. NEED TO HALT OR REDUCE ACTIVITY

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

{See 40 CFR 122.41(c) and 567-64.7(5)(j) IAC}

5. DUTY TO MITIGATE

You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

{See 40 CFR 122.41(d) and 567-64.7(5)(i) IAC}

6. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privileges.

7. TRANSFER OF TITLE

If title to your facility, or any part of it, is transferred the new owner shall be subject to this permit.

{See 567-64.14 IAC}

You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer

8. PROPER OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit.

{See 40 CFR 122.41(e) and 567-64.7(5)(f) IAC}

9. DUTY TO PROVIDE INFORMATION

You must furnish to the Director, within a reasonable time, any information the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to the Director, upon request, copies of any records required to be kept by this permit.

10. MAINTENANCE OF RECORDS

You are required to maintain records of your operation in accordance with 567-63.2 IAC.

11. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

(a) This permit may be modified, suspended, or revoked and reissued for cause including but not limited to those specified in 567-64.3(11) IAC.

(b) This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits.

{See 567-64.3(11) IAC}

(c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards.

{See 40 CFR 122.62(a)(6) and 567-64.7(5)(g) IAC}

The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

12. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

STANDARD CONDITIONS

13. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES

You are required to permit authorized personnel to:

- (a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit.
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- (c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit.
- (d) Sample or monitor, at reasonable times, for the purpose of assuring compliance or as otherwise authorized by the Clean Water Act.

14. TWENTY-FOUR HOUR REPORTING

You shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided within 5 days of the occurrence. The following instances of noncompliance must be reported within 24 hours of occurrence:

- (a) Any unanticipated bypass which exceeds any effluent limitation in the permit.
{See 40 CFR 122.41(l)(5)(ii)(A)}
- (b) Any upset which exceeds any effluent limitation in the permit.
{See 40 CFR 122.41(l)(5)(ii)(B)}
- (c) Any violation of a maximum daily discharge limit for any of the pollutants listed by the Director in the permit to be reported within 24 hours.
{See 40 CFR 122.41(l)(5)(ii)(C)}

15. OTHER NONCOMPLIANCE

You shall report all instances of noncompliance not reported under Condition #14 at the time monitoring reports are submitted.

16. ADMINISTRATIVE RULES

Rules of this Department which govern the operation of your facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65 and 121. Reference to the term "rule" in this permit means the designated provision of Part 567 of the Iowa Administrative Code.

17. NOTICE OF CHANGED CONDITIONS

You are required to report any changes in existing conditions or information on which this permit is based:

- (a) Facility expansions, production increases or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit.
{See 567-64.7(5)(a) IAC}
- (b) If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department.
{See 567-64.2 IAC}
- (c) If your facility is a publicly owned treatment works or otherwise may accept waste for treatment from industrial contributors see 567-64.3(5) IAC for further notice requirements.
- (d) You shall notify the Director as soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit.
{See 40 CFR 122.42(a)}
- (e) No construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2 for "Storm water discharge associated with construction activity".

You must also notify the Director if you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application

18. OTHER INFORMATION

Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report, you must promptly submit such facts or information.

STANDARD CONDITIONS

19. UPSET PROVISION

(a) Definition - "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense in an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph "c" of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the cause(s) of the upset.
- (2) The permitted facility was at the time being properly operated; and
- (3) The permittee submitted notice of the upset to the Department in accordance with 40 CFR 122.41(l)(6)(ii)(B).
- (4) The permittee complied with any remedial measures required by Item #5 of the Standard Conditions of this permit.

(d) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

20. FAILURE TO SUBMIT FEES

This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due.

21. BYPASSES

(a) Definition - Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(b) Prohibition of bypass, Bypass is prohibited and the department may take enforcement action against a permittee for bypass unless:

BYPASSES (Continued)

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance;

(3) The permittee submitted notices as required by paragraph "d" of this section.

(c) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above.

(d) Reporting bypasses. Bypasses shall be reported in accordance with 567-63.6 IAC.

22. SIGNATORY REQUIREMENTS

Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified as required by 567-64.3(8) IAC.

23. USE OF CERTIFIED LABORATORIES

Effective October 1, 1996, analyses of wastewater, groundwater or sewage sludge that are required to be submitted to the department as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements, and operational monitoring tests specified in 567-63.3(4) are excluded from this requirement.

24. LEGAL AND FINANCIAL LIABILITY WAIVER

No legal or financial responsibility arising from the operation or maintenance of any disposal system or part thereof installed by the permittee to achieve compliance with this permit shall attach to the State of Iowa or the Iowa Department of Natural Resources.

Appendix G
WASTE WATER

STORY COUNTY BOARD OF HEALTH PERMIT

Permit NO. 2225

To permit the construction/reconstruction of an on-site wastewater treatment and dispersal system in Story County, Iowa and on Geographic Parcel No. 85-10-03-400-305 & 300-290

To serve Lincolnway Energy, LLC upon NW 1/4 of SE 1/4 S of RY EX Parcel "D" Slide 164 PG 4 & LT 2 of
(Property owner of record) (Lot and/or Parcel Description) (Block)
H O I C Agricultural SD

NE 1/4 of SW 1/4 & NW 1/4 of SE 1/4 or 03 83N 23W of the 5 P.M. 11.32 & 23.35 AC net
(Subdivision) (Section) (Township) (Range) (Lot area)
(Quarter/Quarter)

The waste is to be received from proposed office facilities, serving as many as 40 people or less generating a possible
(Description of structure) (Number)
 anticipated maximum daily load of 800 for primary treatment & 680 for design of secondary treatment as defined by Appendix "A"
(Number)

gallons of wastewater. The site for the system was defined as being on an upland landscape position on a side slope located southwest of the office/plant site. This soil is defined as somewhat poorly drained glacial loam soils, associated with or identified as #55 Nicollet loam by the USDA SCS Soil Survey Report. The permeability
(Soil Series Name)

rate was tested & estimated by density and texture make-up to range in the 10-4 inches per hour at levels in the topsoil
(Number)
 From surface and down to a depth of 18 inches. The plant's proposed new on-site wastewater treatment system is to consist of a conventional septic tank, distribution box and shallow to on-grade distribution beds/trenches. The primary
(Description of Facility)

Wastewater treatment unit is to consist of a new conventional two compartment septic tank (minimum size) 1,500 GAL
(Description of Primary Treatment Facility)

The dispersal/disposal of effluent in/by the secondary treatment system, is to be done by a distribution/absorption type system dependent on conducive soils for treatment by filtration and total absorption. The design and sizing of this system is defined by the site and soils analysis report as made/filed with/by this department. The secondary system shall consist of an effluent sewer routed into a distribution box to serve three (3) or more shallow distribution-absorption
(Description of Secondary Treatment Facility)

beds or trenches having an over-all absorption field area equivalent to three hundred (300) lineal feet of conventional rock filled distribution beds, or its equivalent. (rock filled trenches are approved with only 18 inches wide in glacial loam soils or 36 inch wide rock beds for on-grade systems sized by Table IIIc placed on plowed surface in order to provide the application area) for the secondary method of treatment. The tertiary treatment or final dispersal of the effluent, to filter into the surface or upper drained native top soil layers, in which proper treatment by filtration and total absorption can occur. Supportive fill and cover soils, will be required to be placed around the sides and over any of the exposed sewer, septic tank and distribution material. The distribution beds needs to be placed on a level base/trench bottom, laid with the contour of the land and elevated over soils having three (3) feet to drainable material between the base of the dispersal bed (trench floor) and any confining clay or glacial till layer or adjusted seasonal water level [refer to SEC 69.6(1a.) and 69.6(3a.)]. If a curtain or dewatering drain needs to be installed, it must be placed at least 10 feet away and 3 feet lower than the level of the dispersal trench.

BE ADVISED THAT: All materials and construction work will be according to specifications of Chapter 69 ON-SITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS", in Section 567 (Environmental Protection) of the Iowa Administrative Code and to Story County's "Board of Health Regulation Addendums" to these requirements for the

proposed type of system described above. This proposed facility is of: conventional- *approved alternative (*As defined by Story County Health DEPT)- engineered or other innovative/experimental [referred to in SEC 69.18] in design for on-site wastewater treatment. The construction and operation of this system requires routine maintenance managed by the property owner recorded maintenance agreement /service contract and responsible waiver [refer to SEC 69.10(5) & 69.18(1)c.] to be applied to this system. This permit allows for the system to be constructed within one (1) year of the date of issuing or within the defined time given in an abatement order. Work not completed within this time period, will subject you to acquiring another permit.

Date Issued: September 27th, 2005 Designed by Stone Consulting % Donn Stone, PE
(Installer Name)

Approved by: [Signature] 604 Redbud DR Boone, IA 50036 TEL #515-433-2164
(Administrative Officer) (Address & telephone number)

This complete facility must be inspected by Story County Health Sanitarian or his agent before covering or enclosing the system (refer to section 69C of the Board of Health Regulations). Inspection reports will be made available to the property owner and kept on file at the Story County Health Department as a matter of public record. Any questions on any of the above concerns, may be directed to this office by TEL# 515-382-7241.

The Story County Health Department

Story County Administration Building
900th Street Nevada Iowa 50201
Phone: (515) 382-7240
www.storycounty.com



Application #2225
Fee \$140 paid!
REC#05-148

Application for construction of onsite sewage waste treatment and disposal system in Story County, Iowa;

Applicant: LINCOLN WAY ENERGY LLC PO Box 433
NEVADA IOWA 50201 515.392.8899
(city) (state & zip) (address) (telephone)

Proposed sewage disposal system is to facilitate a new, or existing: (lavatory, toilet & sink for 40 employe
Bedroom house, or other: DOMESTIC WASTEWATER FROM INDUSTRY or 680-800 G/DA
(number) (describe construction)

Property location (legal description): Section: 3 Township: R3 Range: 23
Dispersal bed to be placed on P#10-3-300-290 or LT 2 of H O I C Agricultural SD,

Plant/office site on P#10-3-400-160 or NW SE S of RY EX Parcel "D" Slide 164 PG 4
Lot Size: 23.53 A & T1.3

Property owner of record: Lincolnway Energy LLC A net
975 West Lincolnway STE B Nevada, IA 50201-0000
(city) (state & zip) (address) (telephone)

Zoning classification: A-2 Building permit required? Yes No

Site Evaluation #05-075 ---SITE ANALYSIS--- Date: 7/22/05
Depth to: bedrock from surface greater then 6 FT ground water level from surface seasonal waters held over glacial till layers 3-4 FT
Distance to: nearest private well 600 FT+ SW municipal well NA lake, stream or waterway 40 FT west

Is any of the proposed site in a flood hazard area? Yes No

Percentage of slope on site: 5-9 % Area defined by flagging on the undisturbed site west
(comments)
of the altered/graded site on Parcel #10-03-300-290 in the W $\frac{1}{2}$ of parcel. Drained loose
~~loam from surface down to 4 FT on high area of site & 3 FT of drained on low area in flag-~~
ged zone. -- As defined by the USDA SCS Soil Survey Report as:

Soil description to a five foot depth:

| Horizon | Depth | Color | Texture |
|---------|-------------|--------------|-------------------------------------|
| | <u>0-2</u> | <u>BLACK</u> | <u>SANDY LOAM</u> |
| | <u>2-5+</u> | <u>BROWN</u> | <u>SANDY WEATHERED GLACIAL TILL</u> |
| | | | |
| | | | |

SS-XXXXX
(soil type number)
NICOLLETS loam
(soil series)
XXXXXXXXXXXX

Refer to Engineer's SEPT 26, 2005 plan submission - attached.

| "Percolation Test" Results in test hole: | No. 1 | | No. 2 | | No. 3 | | No. 4 | | No. 5 | | No. 6 | |
|--|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | drop | time | drop | time | drop | time | drop | time | drop | time | drop | time |
| 1st interval | | | | | | | | | | | | |
| 2nd interval | | | | | | | | | | | | |
| 3rd interval | | | | | | | | | | | | |
| 4th interval | | | | | | | | | | | | |

Range from 3.1 to 3.8 MIN/IN or 15.8 - 19.3 IN/HR (Rapid!)
Percolation rate (inches per hour) SEE ATTACHED PERCOLATION TEST REPORT.
Estimated rates for loose loam - 10 to 4 IN/HR as defined by soil morphology study.

I hereby certify that the above information is true.

RECEIVED
OR Professional Soil Classifiers (Soil Scientist) as certified with Board of Soil Classifiers

Signature of property owner in presence of Notary

SEP 27 2005

Signature of Registered Professional Engineer

Sworn and Subscribed to before me this _____ day of _____, 19 _____

Notary Public

Story Co. Health Dept.
SEAL OF _____ SEAL OF _____
NOTARY ENGINEER

Reg No 119601

(-INFORMATION WILL BE ADDED TO THE APPLICATION BY THE HEALTH DEPT DURING PROCESSING!-)

September 26, 2005

RECEIVED

SEP 27 2005

STORY CO.
HEALTH DEPT.

Percolation Test Results and Wastewater Treatment Project

Lincoln Way Energy
Section 3
T83N R23W
Story County, Iowa

Three percolation tests holes were advanced in soils just west of the proposed Carbon Dioxide Plant at the Lincoln Way Energy site that is under construction west of Nevada along Lincoln Way. The percolation tests were performed in general conformance with the methods of IAC (567) Chapter 69.

The soils encountered in the three borings were consistent in type with a top soil layer ranging from approximately 15" to 24" north to south. This layer was found to be a black sandy loam. Beneath the topsoil layer was a very sandy brown to yellow brown weathered glacial till which would be defined as a confining layer. This soil structure contained some gravel and continued to the bottom of the borings which was approximately 39". Soil borings advanced for structures at the site did not note the presence of bedrock when advanced to depths greater than 30 feet.

Each of the three tests holes exhibited similar percolation properties as suggested by the commonality of the soil types. The test holes all noted a percolation rate between 3 and 4 minutes per inch. Table 1 presents the percolation rates as determined.

Table 1
Percolation Rate

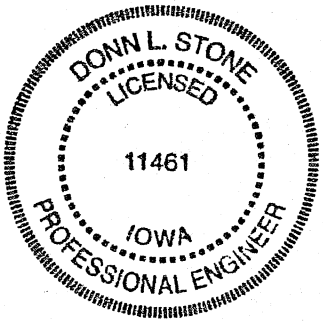
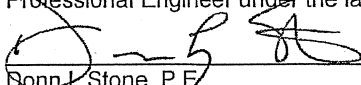
| Test Hole | Minutes/Inch |
|-----------|--------------|
| North | 3.8 |
| Middle | 3.1 |
| South | 3.4 |

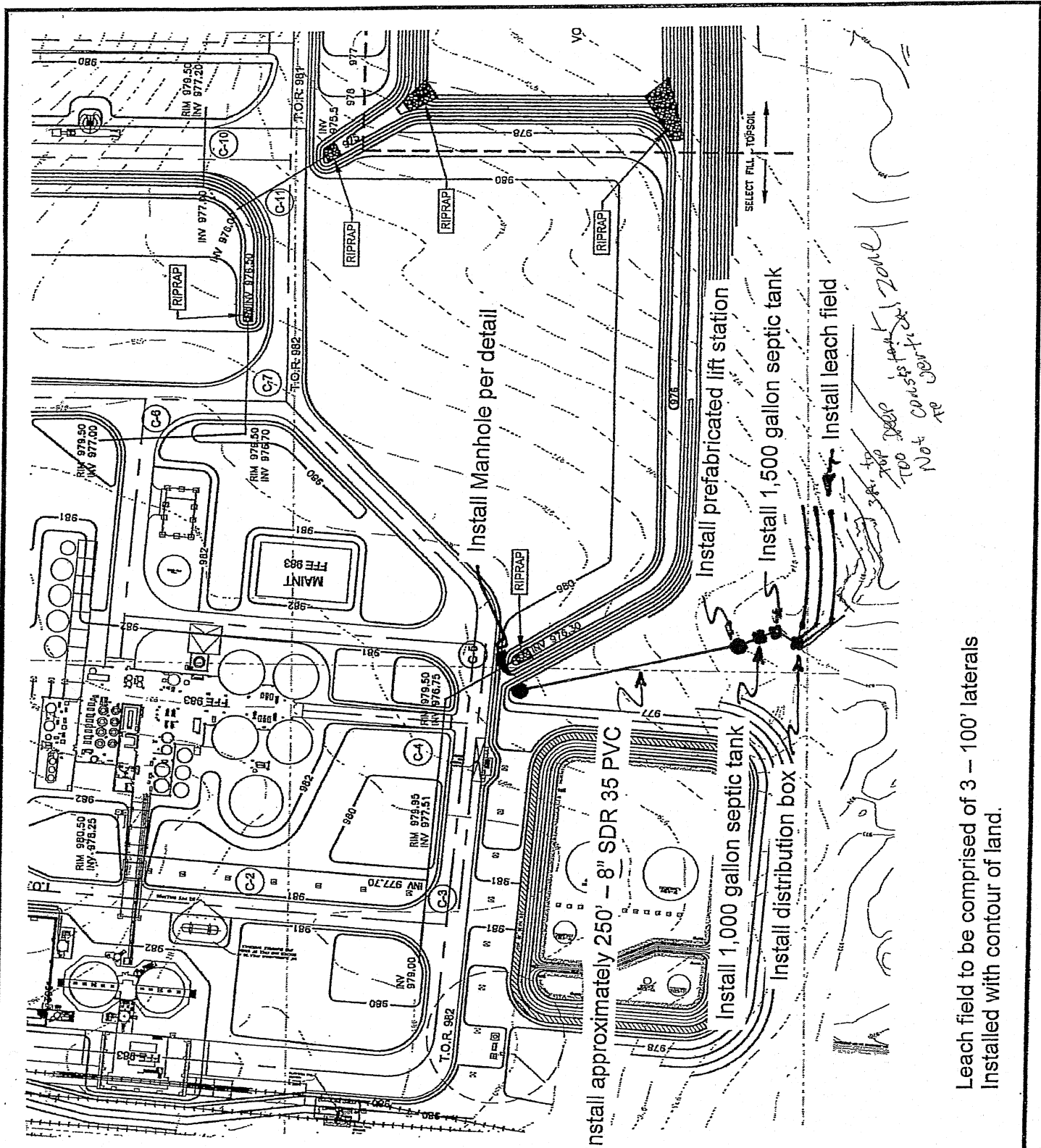
Based on the soil profile and the presence of a confining layer at the top of the glacial till at an approximate depth of 18" to 24", the laterals of the proposed leach field shall be located above the noted confining layer.

Attached are documents that detail the construction of the wastewater conveyance, treatment and disposal system proposed for the Lincoln Way Energy site. The anticipated wastewater generation is from domestic discharges from the industries sanitary facilities. A maximum of 40 persons per day were considered for sizing the septic tanks and leach field system. The leach field and septic tank requirements for the site were based on IAC Chapter 69 Appendix A suggesting 17 gallons per day per person for lateral sizing and 20 gallons per day for septic tank sizing.

Using the noted design gallon per day rates, a minimum septic tank size of 1,500 gallons is recommended for the facility with a minimum of 300' of laterals bedded on 12" of gravel.

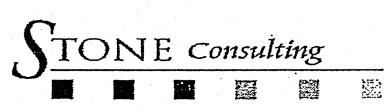
Due to the depth of burial of the sanitary sewer piping at the facility, pumping of the influent to the septic system is required. A self contained pumping station is proposed for the site. The pumped wastewater will discharge to a tank to dissipate energy and collect solids prior to discharge to the 1,500 gallon septic tank.

| | |
|---|--|
|  | <p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.</p> <p> _____ <u>26 Sept 05</u> Don L. Stone, P.E. Date</p> <p>License Number: 11461 My license renewal date is December 31, 2006</p> <p>Pages or sheets covered by this seal: <u>ENTIRE DOCUMENTS.</u></p> |
| | |



*Not consistent zone
top deep
100 deep
are*

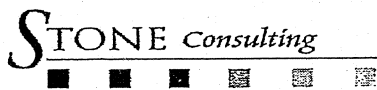
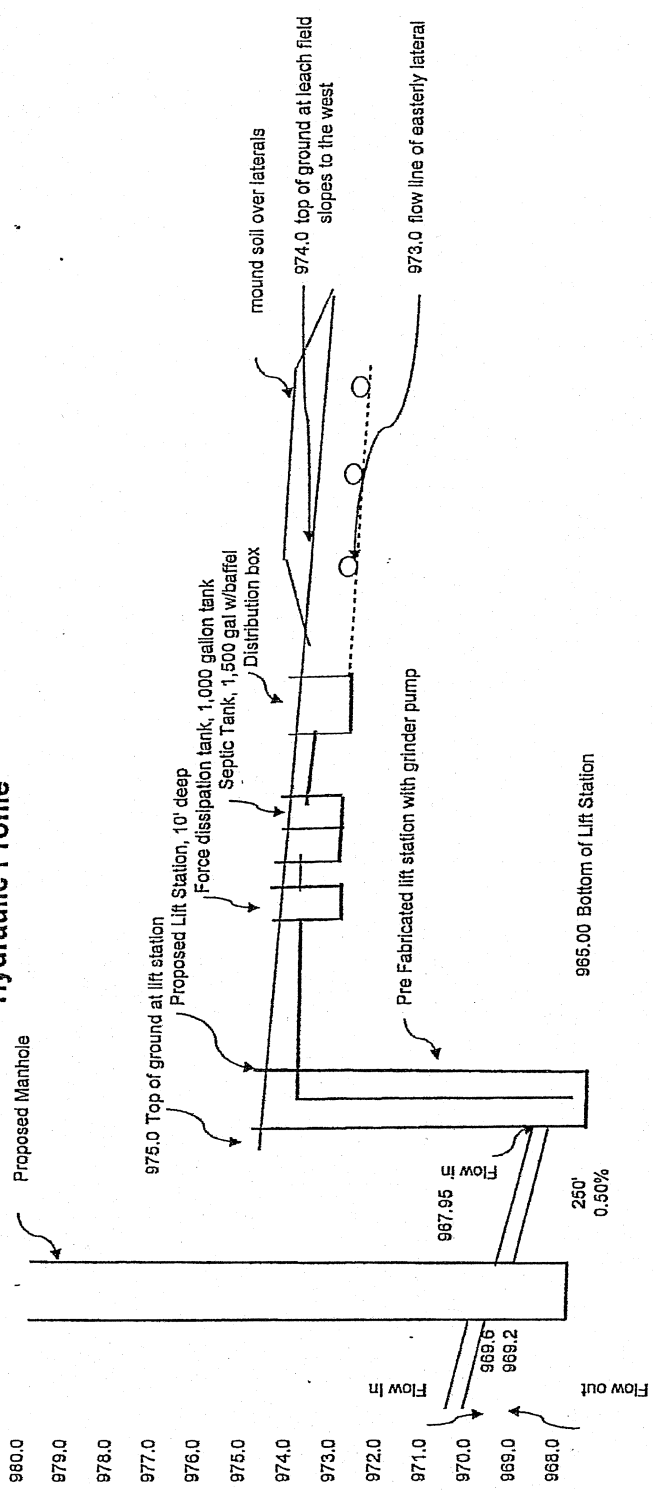
Leach field to be comprised of 3 - 100' laterals
Installed with contour of land.



Layout Detail
Wastewater Project
Lincoln Way Energy, Nevada, IA

Figure: 1
SC075-05.401
September 2005

Hydraulic Profile



Hydraulic Profile
Wastewater Project
Lincoln Way Energy, Nevada, IA

Figure: 2
SC075-05.401
September 2005

Parcel {As shown in Real Estate File}: (4 of 4 parcel records – Entry area into the plant from south)

RTOWN01-Real Estate Owner/Desc Inquiry - V1004.04

Parcel #: 10 03 400 305 Map #: 10 03 400 305 Add Yr/Rsn: 2003 KS Del Yr/Rsn: [] []

Property Adr: 59511 LINCOLN HIGHWAY Adtr TD: 076 NEVADA/NEVADA.AG

Owner Id: 45933 Tax Rec #: 21744 Gr Acres: 30.17 N Acres: 29.03 Assr ID: 076 NEVADA/NEVADA.AG

Tax: SW SE EX PARCEL"D" Sec: 03 Twp: 83 Range: 23

Desc: SLIDE 164 PG 4 Subdivision: 51003 Block: 400 Lot: 305

Recording Book: 190 Page: 147 Date: 11 09 2004 C & FN/Slide: 00000 Page: [] Date: [] []

Instrument #1: 000415141 Type: Warranty Deed Held: Single Ownership Date: 11 5 2004

Instrument #2: 000000000 Type: Warranty Deed Held: Single Ownership Date: [] [] []

Instrument #3: 000000000 Type: [] Held: [] Date: [] [] []

Deed Holder Name 1: LINCOLNWAY ENERGY LLC

Contract Buyer Name 1: []

Trustee Name 1: []

Mail To: LINCOLNWAY ENERGY LLC
976 WEST LINCOLNWAY STE B
NEVADA IA 89201 - 0000

Values: [] Drainage: [] TIF: [] Taxes: [] Misc Msg: [] Zoning: []

History: [] OK: [] Return: [] Exit: []



Appointment Time on site: 07/22/05 @ 9:00 a.m. by DN

Field notes about site:

Retrieved property information from department files and mapped area data by means of the ARCMAP program. Went to the site to meet Mr. Stone at the scheduled at time. Checked in at the site at the Contractor's Security Office (FAGEN Construction, INC) . Mr. Stone met me and presented the construction plan for the site. The area over the property has received a large amount of excavating, shaping and regarding work. The building site had been staked and concrete was being form for the various foundations. The area was original open farmland with little to moderate slope of upland prairie make-up, but with a large portion of poorly drained prairie pothole formation. The extensive reshaping and grading work has changed the shape of this area (approximately 130 acres or more). That area which has not been alter or was preserved, lies to the west/southwest of the proposed plant site and in the area near the midpoint of Parcel #10-03-300-290. This area is east of the golf course and a part of the undisturbed rough area upslope of the water way that winds from SE to NW and then west into the golf course. The area to the east of the native/undisturbed rise, has been altered with added soils to elevated the site to a level consistent with the plant site approximately 150 FT to the east-NE (approximately 3-5 FT higher then the area where the soils were undisturbed).

The wastewater generated at the plant site is to be limited to domestic wastewater from employee use of lavatory, toilet, shower and utility sink. The estimated flows were discussed, as well as what products were available for construction of on-site wastewater treatment system construction. An estimate at this time is that the wastewater burden would be less then 1,000 G/DA and would be more accurately determined by the consultant when studying the proposed facility plan and various the design guidelines. It is conceived that a simple primary treatment means (septic tank) and a secondary system of effluent dispersal to the native soils for filtration and total absorption is being proposed.

Mr. Stone took me down to the site he had found and preserved for a proposed secondary system placement. Mr. Stone and performed soil boring studies and percolation tests over several locations in the area of the undisturbed soils, and presented these findings.

In evaluating the site, I first determined the place on the landscape. This location is on the upland side slope to foot slope and above an obvious swale of a waterway. From the low area of the waterway, the elevation of this site is 3 to 5 FT higher than where water has formed the waterway. In coring the different points across the site from high area down to the lower area on the foot slope, the profiles revealed a drained loamy dark brown to tan to mottle and gray soils from surface down to the 4 foot depth in the higher areas of the site. And in the mid-level and lower areas on the site, the drainable or mottled soil layers are seen nearer the surface by as much as a foot or more, typical Nicollet loam #55 soil type by USDA SCS Soil Classification. The loamy soil material from surface down to the 4 FT depth, usually demonstrates permeability rates in the 10 to 4 IN/HR range. Mr. Stone presented that he had found percolation rates at 3.8 to 3.1 MIN/IN -- or more rapid. This finding supports the direction for applying a soil absorption type field at this location, however shallow bed arrangements will need to be applied in order to observe the vertical zone requirements of SEC 69.6(1) in Chapter 69 of SEC 567 in the IAC. To give further direction on how to arrange a possible dispersal field and maintain the proper 3 FT vertical zone above the seasonal high water levels (as shown by the soil mottling in the soil profile). Contour lines was flagged on the highest part of the site and then those lines down slope for the area of need for as many as four (4) lateral runs or 400 lineal feet -- (an approximated system need) was flagged off.

In summarizing about the site, soils and system need with Mr. Stone, it is understood that the combination of wastewater sources will direct the domestic wastewater burden to the primary treatment tank (septic tank) by gravity sewer and may involve an influent ejector pump (where necessary) to lift to the influent gravity sewer line. The septic tank is to be located in stable ground, aside from any drives or under areas where equipment might compromise its structure. The tank is to be provided and access riser and be protected from any ground, surface or storm water influence/interference. The effluent sewer is to run down along the area of fill where support and stability will assure proper grading and protection. Risers for cleanout or monitoring will be included in the run to place and provide ease in maintenance. The secondary system will consist of a simple distribution box and a number individual dispersal beds runs with the landscape contour and placed as shallow as required to provide the needed vertical zone difference for filtration/absorption (3 feet). The size of the system will be calculated by Mr. Stone and the best engineering practice with minimum being that defined by Appendix "A" in Chapter 69 REGS. This was acknowledged and later (September 27, 2005) the application and engineer plan was received from Mr. Snyder, outlining that which was described above and the final sizing needs.

Appendix H
HAZARDOUS WASTE GENERATORS AND HANDLERS



EnviroMapper for Water

[Recent Additions](#) | [Contact Us](#)

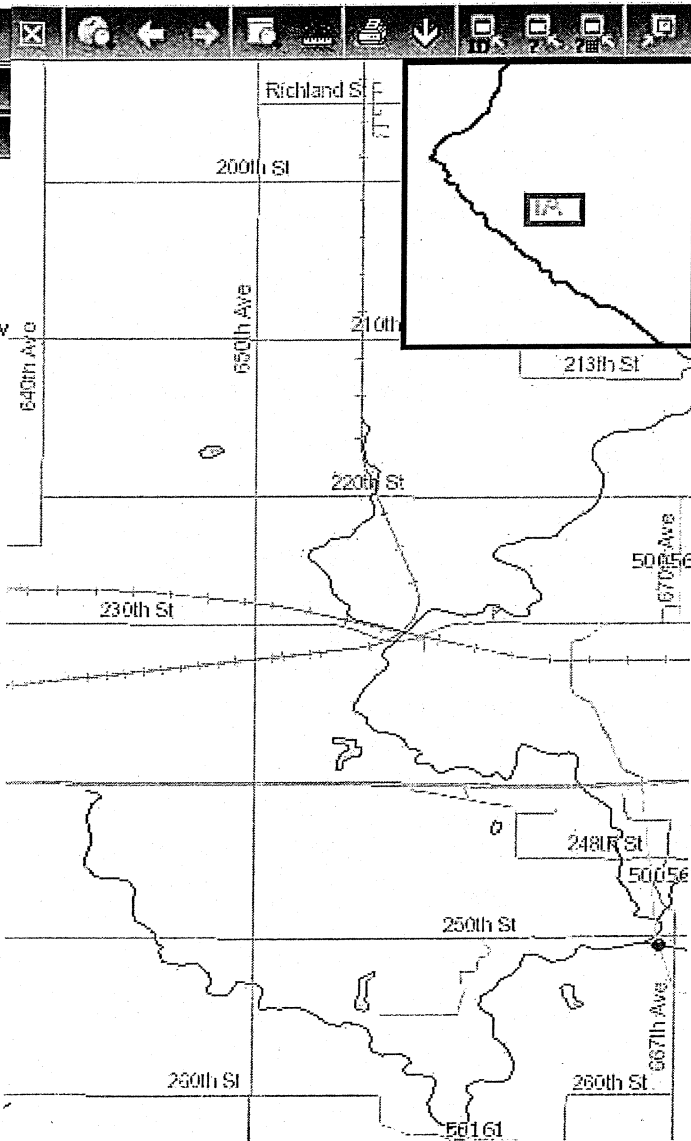
[EPA Home](#) > [Water](#) > EnviroMapper for Water

Help

Zoom to Geographic Area

Map Contents

- Water Quality
- Facility Registry
 - Superfund Sites (National Priorities List)
 - Water Dischargers (Permit Compliance System)
 - Hazardous Waste (Resource Conservation Recovery Act)
 - Toxic Releases (Toxic Release Inventory)
- EPA Water Monitoring Stations
 - Water Monitoring Stations (STORET)
- USGS Water Monitoring Stations
- Political Boundaries
- Watersheds
- National Wetlands Inventory (NWI)
- National Estuary Program (NEP)
- Surface Water
- Ecological Boundaries
- Transportation
- Base Imagery



Done

Mostly Cloudy, 61 °F Thu: 73 °F Fri: 74 °F



Inbox - Micros...



Windows Media...

1 - Air Quality ...



9:23 AM

| Lincolnway Energy, LLC | | | |
|---|--------------------------------|--------------|-------------|
| Summary of Actual Emissions for Operating Year 2008 | | | |
| Emission ID | Emission Source(s) | VOC (tons) | HAP (tons) |
| S10 | Coal Combustion (BFB)* | 3.67 | 4.04 |
| S40 | CO2 Scrubber | 8.63 | 2.19 |
| S50 | Product Loadout Flare | 1.02 | 0.04 |
| | Rail Loading | 0.12 | 0.001 |
| | Truck Loading | 0.98 | 0.03 |
| S60 | Methanator Flare | 1.06 | 0.05 |
| S61-S65 | Liquid Storage Tanks | 2.06 | 0.51 |
| S70 | DDGS Cooling Baghouse*** | 0.49 | 0.03 |
| S82(F82) | Equipment Leaks | 5.20 | 0.91 |
| S110 | Diesel Fire Pump | 0.0001 | |
| | "Insignificant" Process Vents | 0.17 | |
| | Modified WDGS Store/Handling** | 0.11 | 0.02 |
| Totals, Plantwide | | 23.51 | 7.82 |

Note: Per subrule 567 IAC 22.106(7), emissions for Emergency Fire Water Pump (FWP), Insignificant Process Vents (IPV), Corrosion Inhibitor Tank (CIT) are not included as these are all insignificant activities.

* Bubbling Fluid Bed (BFB) Coal Combustion Emission Factors for PM/PM10/PM2.5 based on averaging stack test data from 3/17/08, 3/18/08, and 3/20/08 - Methods 5 and 202.

- BFB VOC emission estimate includes potential emissions from the DDGS dryer and process streams.
- BFB Emission Factors for NOx, SO2, and CO are based on the averaging CEMs data for 2008.

** Wet DGS emissions may be subtracted from above total as 100% DDGS scenario is worst case.

*** DDGS Cooling System exhausts through a fabric filtration baghouse system

- Fugitive Components do not include distillation components operating under negative pressure.
- Trucks assumed carrying gasoline (worst case) prior to taking on load of denatured ethanol w/flare
- Rail ethanol loadout will be by dedicated railcar w/flare
- SO2 created by fluid bed combustor includes process sulfur (from H2SO4) and the sulfur from coal.
- Coal is Powder River Basin, North Antelope Mine, low sulfur, 8800 BTU/lb (approximate, as delivered wet).
- All baghouses will operate at >0.004 grains/scf (per manufacturer guarantee).
- 6,800 gal. sulfuric acid storage tank (exempt per Chapter 22.12), emissions are approximately 0.22 lb/yr.

Emissions from combustion of coal in Bubbling Fluid Bed (BFB)

| Basis: | | S10: | | | | |
|--|-------------------------|--|------------------------|---------------------|----------------|----------------|
| | PM/PM10/PM2.5 | Based on averaging Lincolnway stack test data from 3/17/08, 3/18/08, and 3/20/08 | | | | |
| | NOx | Based on averaging CEMS data for 2008 | | | | |
| | CO | Based on averaging CEMS data for 2008 | | | | |
| | SO2 | Based on averaging CEMS data for 2008 | | | | |
| | VOC | Based on Lincolnway stack test data from 12/2008 | | | | |
| | HAP | Based on Lincolnway stack test data from 06/13/2007 | | | | |
| Unit assumed to operate at maximum fuel input capacity | | | | | | |
| Assumed operation time: 8185.25 hr/yr | | | | | | |
| Natural gas, propane or corn will be used for bed startup. | | | | | | |
| Actual Emissions - an engineering estimate | | | | | | |
| Pollutants | | | | | | |
| Criteria Pollutants | Emission Factor (lb/hr) | lb/MMBtu | MMBTU/hr | hrs/year | lbs/year | tons/year |
| | | | | 2008 | 2008 | 2008 |
| PM/PM10/PM2.5 | 38.62 | | | 8185.25 | 316114.4 | 158.06 |
| NOx | | 0.096 | 215.78 | 8185.25 | 169556.5 | 84.78 |
| CO | | 0.02 | 215.78 | 8185.25 | 35324.3 | 17.66 |
| SO2 | | 0.092 | 215.78 | 8185.25 | 162491.6 | 81.25 |
| VOC | 0.897 | | | 8185.25 | 7342.2 | 3.67 |
| HAP Pollutants (tested) | | lb/hr | | hrs/year 2008 | lbs/year 2008 | tons/year 2008 |
| HCL | | 0.18 | | 8185.25 | 1465.2 | 0.73 |
| HF | | 0.03 | | 8185.25 | 204.6 | 0.10 |
| Hg | | 0.002 | | 8185.25 | 14.5 | 0.01 |
| Chlorine | | 0.277 | | 8185.25 | 2267.3 | 1.13 |
| Lead | | 0.0002 | | 8185.25 | 1.5 | 0.001 |
| Acetaldehyde | | 0.104 | | 8185.25 | 852.9 | 0.43 |
| Acrolein | | 0.140 | | 8185.25 | 1142.7 | 0.57 |
| Formaldehyde | | 0.023 | | 8185.25 | 187.4 | 0.09 |
| Methanol | | 0.179 | | 8185.25 | 1466.0 | 0.73 |
| Benzene | | 0.015 | | 8185.25 | 122.8 | 0.06 |
| sub total | | | | | | 3.862 |
| Other HAPS (AP-42 or Pilot Plant) | Organic Compound | Emission Factor (lb/ton) | Amount per year (tons) | lbs/year 2008 | tons/year 2008 | |
| | Acetophenone | 1.36E-05 | 99,665 | 1.36 | 0.0007 | |
| | Benzyl chloride | 6.36E-04 | 99,665 | 63.42 | 0.0317 | |
| | Carbon disulfide | 1.18E-04 | 99,665 | 11.78 | 0.0059 | |
| | Isophorone | 5.27E-04 | 99,665 | 52.55 | 0.0263 | |
| | Methyl bromide | 1.45E-04 | 99,665 | 14.50 | 0.0072 | |
| | Methyl chloride | 4.82E-04 | 99,665 | 48.02 | 0.0240 | |
| | Methyl ethyl ketone | 3.55E-04 | 99,665 | 35.34 | 0.0177 | |
| | Methyl hydrazine | 1.55E-04 | 99,665 | 15.40 | 0.0077 | |
| | Methylene chloride | 2.64E-04 | 99,665 | 26.28 | 0.0131 | |
| | Propionaldehyde | 3.45E-04 | 99,665 | 34.43 | 0.0172 | |
| | Toluene | 2.18E-04 | 99,665 | 21.75 | 0.0109 | |
| | Chloromethane | 2.09E-04 | 99,665 | 20.84 | 0.0104 | |
| sub total | | | | | 0.173 | |
| Total HAPs (full scale tested, pilot plant tested, AP-42): | | | | Total: 4.035 | | |

* Pilot Test Basis

Basis: AP-42, Table 1.1-14 (Controlled Coal Combustion) or Pilot Test Plant







*Note: Some HAP components tested below detection limits. If this was the case, the detection limit was used for conservatism.


Basis: AP-42, Table 1.1-14 (Controlled Coal Combustion) or Pilot Test Plant





Date Printed: 9/21/2009






Legend

RC/EZ/EC Areas

-  Renewal Community
-  Empowerment Zone
-  Enhanced Enterprise Community
-  Enterprise Community
-  Enterprise Zone
-  Enterprise Zone and Enterprise Community (D.C. only)

 Selected RC/EZ/EC Areas

- Transportation**
-  Interstate Highways
-  State Highways
-  State and County Highways
-  Streets

- Hydrography**
-  Water
- Political**
-  State
-  State Boundary
-  County
-  County Boundary

RC/EZ/EC Mapping

The address 59511 LINCOLN HWY 50201-7992 is not in an RC/EZ/EC area.

State: IA - County: STORY COUNTY - Census Tract: 0001.00

Designation History:

2002 - Present: n/a
1998 - 2001: n/a
1994 - 1997: n/a
Urban/Rural: n/a

Developable Site: No

Story County

59511 LINCOLN HWY 50201-7992
Lincoln Hwy



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U.S. Department of Housing and Urban Development
451 7th Street S.W., Washington, DC 20410
Telephone: (202) 708-1112 TTY: (202) 708-1455

Appendix I
PARKS AND WILDERNESS

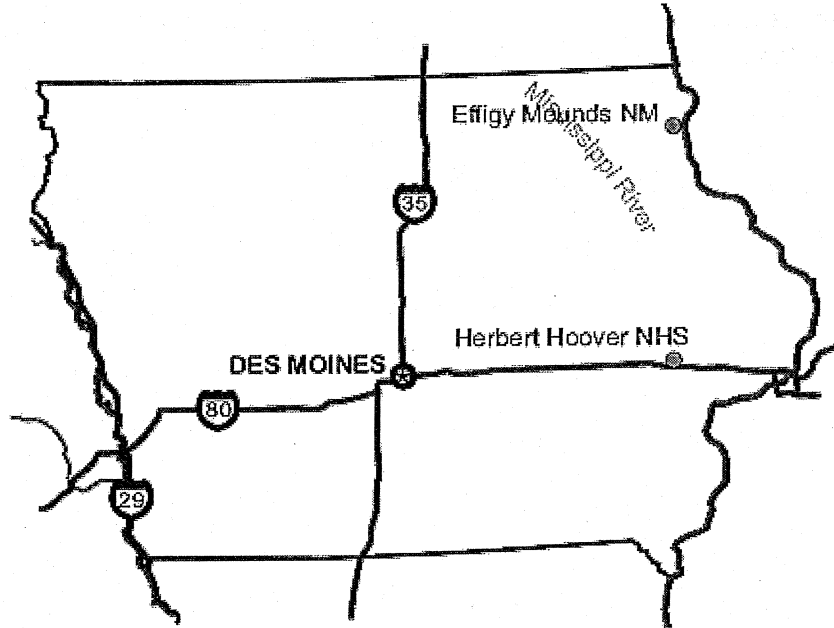
National Park Service

National Park Service
U.S. Department of the Interior



Parks and Recreation
View all Parks A-Z
Geographic Search
Search by Topic

IOWA



| | |
|--|-------------------------|
| Effigy Mounds National Monument Harpers Ferry, IA | National Monument |
| Herbert Hoover National Historic Site West Branch, IA | National Historic Site |
| Lewis & Clark National Historic Trail Eleven States: , ID,IL,IA,KS,MO,MT,NE,ND,OR,SD,WA | National Historic Trail |
| Mormon Pioneer National Historic Trail Various States, IL,IA,NE,UT,WY | National Historic Trail |

ParkNet

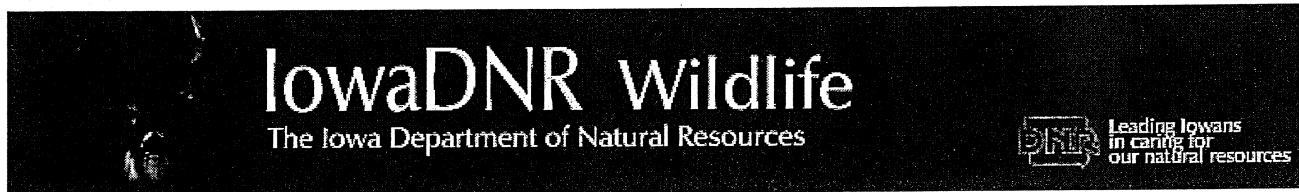
U.S. Department of the Interior

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[DNR Homepage](#)
[A-Z Topic Index](#)

[Wildlife Homepage](#)
[Site Index](#)
[Wildlife Action Plan](#)
[About the Wildlife Bureau](#)

General Information

[Conservation Law Enforcement](#)
[Hunting and Trapping](#)
[Non-Game Wildlife](#)
 - [Iowa's Wildlife](#)
 - [Wildlife Diversity Events](#)
 - [Support Non-Game](#)
 - [Wildlife Diversity Events](#)
 - [Threatened & Endangered](#)

Common Requests

[Buy Licenses Online](#)
[Regulations / Season Dates](#)
[Hunter Education](#)
[Shooting Sports](#)
[Populations/Harvest Trends](#)
[Bowhunter Survey](#)
[Private Lands Management](#)
[Public Hunting Areas](#)
[Wildlife Damage Management](#)
[Wildlife Management Areas](#)
 - [Lake Odessa WMA](#)
[Wildlife and Wind Resource Development](#)

Deer Information

[Deer Information](#)
[Deer Hunter Registry](#)
[Application Deadlines](#)
[Harvest by County](#)
[Harvest Reporting](#)
 - [Reporting Checklist](#)
[Landowner Registration](#)
[NonRes Deer App Status](#)
[Left Over Quota Licenses](#)
[Deer Mgt Zone Hunts](#)
 - [State Park DMZ Hunts](#)

Turkey Information

[Turkey Information](#)

[Wildlife Management Areas](#) : Public Wildlife Management Areas, Counties O-S

[O'Brien](#) . [Osceola](#) . [Palo Alto](#) . [Plymouth](#) . [Pocahontas](#) . [Polk](#) . [Pottawattamie](#) . [Ringgold](#) . [Sac](#) . [Scott](#) . [Shelby](#) . [Sioux](#) . [Story](#)

Area names showing a link indicate that there is a pdf map of this area. Maps range from 350K to 1.2MG. To view and print these maps you will need the [Adobe Acrobat Reader](#).

Game Key:

D=deer, T=turkey, S=squirrel, P=pheasant, G=grouse, W=waterfowl, R=rabbit, Q=quail

| Area | Game | Acreage/Description | Location/Directions |
|----------------------------------|-----------|---|--|
| O'Brien | | | |
| Waterman Creek | D,P,W | 223 acres; Stream, Uplands | 6 miles S of Hartley on M12, 1 mile E on 390th St |
| Waterman Prairie | D,T,P | 1,313 acres; Prairie, Timber, Stream | 3.5 miles SE of Sutherland on Hwy 10, 2 miles N on Wilson |
| Osceola | | | |
| Iowa Lake | W | 114 acres; Shallow lake, Marsh | 1 mile W of Harris on Hwy 9, 5 miles N on White Ave |
| Rush Lake | P,W | 348 acres; Shallow lake, Marsh | 2 miles E of Ocheyedan on Hwy 9 |
| Palo Alto | | | |
| Blue Wing Marsh | D,P,W,R | 834 acres; 1/3 Marsh, 2/3 Upland | 2 miles N of Ruthven on 350th Ave, 0.5 mile E on 340th St, 0.5 mile N on 355th Ave |
| Dewey's Pasture | D,S,P,W,R | 5,528 acres; 2/5 Lakes, 2/5 Marsh, 1/5 Upland | 0.5 mile W of Ruthven on Hwy 18, 4 miles N on N18 |
| Fallow Marsh | D,P,W,R | 292 acres; 1/3 Marsh, 2/3 Upland | 3 miles S of Graettinger on Hwy 4, 2 miles W on 320th St |
| Five Island Lake | D,P,W | 1,058 acres; Lake, Marsh | N side of Emmetsburg, W side of N48 |
| Perkin's Marsh | D,P,W,R | 25 acres; 1/2 Marsh, 1/2 Upland | 3 miles S of Graettinger on Hwy 4, 0.5 mile W on 320th St |
| Rush Lake | D,S,W,R | 529 acres; Marsh, Timber | 6.5 miles N of Laurens on N28 |
| Silver Lake | D,W,R | 660 acres; Lake, Timber | 2 miles W of Ayrshire on 420th St |
| Virgin Lake | D,P,W,R | 330 acres; 3/4 Lake, 1/4 Upland | 0.5 mile W of Ruthven on Hwy 18, 2 miles S on N18, 0.5 mile E on 380th St |

Application Deadlines
 Harvest by County
 Harvest Reporting
 - Reporting Checklist
 Landowner Registration
 NonRes Turkey App Status
 Left Over Quota Licenses

Additional Species

Bobcat
 Osprey
 Peregrine Falcons
 Pheasant Information
 Waterfowl Information
 - Fall Migration Survey

Additional Information

Avian Influenza (Bird flu)
 Chronic Wasting Disease
 Conservation Partners and Cooperators
 Management Activities
 Prairie Resource Center
 West Nile Virus
 Whooping Cranes

| | | | |
|---|-------------|---|---|
| <u>West Fork</u> | D,T,S,P,W,R | 1,604 acres; River floodplain, Marsh, Grassland, Timber | 4 miles N of Emmetsburg on N40, 1 mile W on 320th St OR 2 miles N of Emmetsburg on 450th Ave OR 2.5 miles S of Emmetsburg on Hwy 4, 0.5 mile W on 405th St |
| Plymouth | | | |
| <u>Deer Creek</u> | D,T,S,P,W,R | 1,032 acres; Lake, Upland | 5 miles N of Sioux City on Hwy 12, 5 miles NE on K18, 1 mile W on Butcher Rd |
| Pocahontas | | | |
| <u>Kalsow Prairie</u> | P | 159 acres; Native Prairie | 3 miles N of Manson on N65, 1 mile W on 630th |
| <u>Little Clear Lake</u> | W | 166 acres; Shallow lake, Marsh | 10 miles W of Pocahontas on Hwy 3 |
| <u>Lizard Lake</u> | W | 351 acres; 3/4 Marsh, 1/4 Timber | 3 miles W of Gilmore City on Hwy 3, 4 miles S on 320th Ave |
| <u>Shimon Marsh</u> | P,W | 1,277 acres; 1/3 Marsh, 2/3 Upland | 1 mile W of Fonda on Hwy 7, 2 miles N on 120th Ave |
| Polk | | | |
| <u>Big Creek</u> | D,P,T,W | 2,045 acres; 1/3 Lake, 2/3 Upland | 1 mile N of Polk City on Hwy 415 |
| <u>Chichaqua</u> | D,T,P,W | 2,605 acres; Prairie upland, Timber | Skunk River Valley, NE Polk County |
| <u>Paul Errington Marsh</u> | P,W | 309 acres; 1/3 Marsh, 2/3 Upland | 4 miles E of Ankeny on NE 94th Ave, 2 miles N on NE 56th St |
| <u>Red Rock</u> | D,S,P,W | 30,767 acres; | North: 3.5 miles S of Monroe on Hwy 14, 7 miles W on Carpenter St South: 4 miles N of Pleasantville on 40th Ave |
| <u>Saylorville Saylorville Index Maps 1-5 Maps 6-11</u> | D,T,W | 10,472 acres; 1/2 Timber, 1/4 Upland, 1/4 Reservoir | Des Moines River valley from Hwy 17 in Polk county N to Fraser in Boone county |
| Pottawattamie | | | |
| <u>Boyer Bend</u> | D | 77 acres; Timber | Public access by Missouri River only |
| <u>Green</u> | D,S | 10 acres; Timber | 2 miles S of Avoca on Hwy 59, 0.75 mile E/td> |
| <u>Pigeon Creek</u> | D,W | 98 acres; 3/4 Timber, 1/4 Wetland | Public access by Missouri River only |
| <u>Wilson Island Recreation Area</u> | D,W | 423 acres; Timber | Exit 72 off I-29, W 6miles on DeSoto Ave, area on left |
| Ringgold | | | |

| | | | |
|---------------------------------|----------------------|--|---|
| <u>Fogle Lake</u> | D,P,W,R,Q | 325 acres; 1/4 Lake, 3/4 Upland | 0.5 mile W of Diagonal on J23 |
| <u>Kellerton</u> | D,P | 1,123 acres; Upland | 2 miles W of Kellerton on Hwy 2, 1 mile S on gravel |
| <u>Mount Ayr</u> | D,T,P,R,Q | 1,447 acres; 1/2 Timber, 1/2 Upland | 2 miles W of Mount Ayr on Hwy 2/169, 2 miles S on Hwy 169, 2 miles W on T43 |
| <u>Ringgold</u> | D,T,P,R,Q | 2,253 acres; 1/4 Timber, 3/4 Upland | 6 miles E of Mount Ayr on Hwy 2, 8 miles S on P64, 1 mile W on gravel road |
| <u>Sand Creek</u> | D,T,P,R,Q | 3,550 acres; 3/4 Timber, 1/4 Upland | 3 miles N of Grand River on R15, 1 mile W on gravel road |
| Sac | | | |
| <u>Black Hawk Marsh</u> | D,P,W | 1,132 acres; 1/2 Upland, 1/4 Marsh, 1/4 Timber | 1.5 miles W of Carnarvon on D59, 1 mile N on M68 |
| <u>Burrow's Pond</u> | P,W | 412 acres; 1/3 Marsh, 2/3 Upland | 2 miles W of Nemaha on D15, 1 mile S on Lee Ave |
| <u>Kiowa Marsh</u> | P,W | 1,059 acres; 1/4 Marsh, 3/4 Upland | 2 miles E of Early on D27 |
| <u>Sac City Access</u> | D | 32 acres; Timber, Upland, River | 0.5 mile S of Sac City on Sierra Ave |
| <u>Sac City Wetland Complex</u> | P,W (once developed) | 356 acres; 1/4 Wetland, 3/4 Upland (once developed) | 0.5 mile W of Sac City on 260th St |
| <u>Tomahawk Marsh</u> | P,W | 428 acres; 1/2 Marsh, 1/2 Upland | 2 miles W of Sac City on Hwy 20, 4 miles S on M68 |
| <u>White Horse Access</u> | D,P | 199 acres; 2/3 Timber, 1/3 Upland, River access | 4 miles E of Lake View on Hwy 71, 2 miles E on 330th St, 0.5 mile S on Wadsley Ave, 1 mile E on 335th |
| Scott | | | |
| <u>Crow Creek</u> | S,P,R | 54 acres; Lake, Timber | Davenport, at Hwy 965 & 61 |
| <u>Lost Grove Lake</u> | D,P,R | 1,698 acres; 3/4 Cropped/Upland, 1/4 Timber | 6 miles N of Davenport on Utica Ridge Rd |
| <u>McCausland</u> | D,T,P,W,R | 168 acres; 1/4 Timber, 3/4 Marsh | E edge of McCausland on Bennett St |
| <u>Princeton</u> | D,T,S,W | 1,193 acres; 3/4 Wetland, 1/4 Timber & Cropped | 0.5 mile N of Princeton on Hwy 67, 1 mile N on 285th Ave, E on 266th St |
| Shelby | | | |
| <u>V&W Peterson</u> | D,P,R,Q | 453 acres; Upland | 2 miles S of Manilla on Quince Rd |
| Sioux | | | |
| <u>Big Sioux</u> | D,T,P | 233 acres; | 6 miles W of Rock Valley on |

| | | | |
|--------------------------------------|---------|---|--|
| <u>River - Groth</u> | | Timber, Upland, River | Hwy 18, 2.5 miles W on 310th |
| <u>Big Sioux River - Hoogendoorn</u> | D,T,P | 116 acres; Timber, Upland, River | |
| <u>Big Sioux River - Miller</u> | D,T,P | 83 acres; Timber, Upland, River | |
| Story | | | |
| <u>Bob Pyle Marsh</u> | P,W | 79 acres; 1/2 Upland, 1/2 Marsh | 2 miles W of Story City on E15, 1 mile N on gravel rd, 0.5 mile W on 400th St |
| <u>Colo Bogs</u> | P,W | 452 acres; 1/4 Wetland, 3/4 Upland | 2 miles E of Colo on Hwy 30 |
| <u>Hendrickson Marsh</u> | D,P,W,R | 775 acres; 2/3 Upland, 1/3 Marsh, Lake | 2.5 miles W of Rhodes on E63 |

- [Public Wildlife Management Areas, Counties A-C](#)
- [Public Wildlife Management Areas, Counties D-J](#)
- [Public Wildlife Management Areas, Counties K-M](#)
- [Public Wildlife Management Areas, Counties O-S](#)
- [Public Wildlife Management Areas, Counties T-W](#)



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[DNR Homepage](#)
[A-Z Topic Index](#)
[State Parks Home](#)
[State Parks List](#)
[Honey Creek Resort](#)
[Rules & Regulations](#)
[Camping](#)
[Group Camps](#)
[Lodges/Shelters](#)
[Cabins](#)
[Frequently Asked ?s](#)
[Civilian Conservation Corps](#)
[Dock Permit Information](#)
[Submit your photos!](#)

Campground Reservation System

[General Information](#)
[Make a Reservation](#)
[Maps of Campsites](#)
[Frequently Asked ?s](#)

Closure Information

[Construction & Renovation](#)
[Park Lake Levels](#)
[Weather Related](#)

Special Projects

[Storm Lake Marina](#)
[Pleasant Creek Ecological Management Plan](#)

Recreational Opportunities

[Events Calendar](#)
[Boating](#)
[Geocaching](#)
[Deer Management Hunts](#)
[Camping Tips & Recipes](#)
[Museums/Interpretive Centers](#)
[Additional Links](#)
[Conservation and Recreation Grants](#)
[Interpretive Positions](#)

State Parks and Recreation Areas Directory

Recreation Opportunities abound in Iowa State Parks and Recreation Areas. From hiking and camping to bird-watching and bicycling, each park offers outdoor enthusiasts a multitude of diverse and exciting adventures. Rich in history and natural resources, Iowa is a treasure chest of recreational excellence. Following is a list of state parks and recreation areas. Those items that are clickable will take you to information about that park.

Warning Camper! Did you Know...

That certain areas within Indiana, Illinois, Maryland, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin are currently under a federal firewood transport quarantine established by the [Animal and Plant Health Inspection Service \(APHIS\)](#), U.S. Department of Agriculture to prevent the spread of emerald ash borer (EAB). It is felt that EAB may be resident in the wood and could be spread through firewood transport to un-infested areas like Iowa.

It is in direct violation of the USDA APHIS quarantine for you to bring firewood from quarantined states into Iowa. Do not bring firewood from your state into Iowa.

<http://www.emeraldashborer.info/>

UNWANTED! EMERALD ASH BORER



For further information visit
www.emeraldashborer.info/



State regulations require horses, mules and donkeys being transported interstate (from one state to another) must have a current Certificate of Veterinary Inspection (health certificate) and negative Coggin's test (EIA). This paperwork must accompany the animal into the State of Iowa. Please refer to [Iowa Dept of Agriculture Admissions Regulations](#) for more information.

For example, a person from Missouri who wishes to bring their horses, mules or donkeys into Iowa must provide a current Certificate of Veterinary Inspection (health paper) which lists the description of the animals, date of a negative Coggin's test (tested within the last twelve months), date of the test, the lab that performed the test and the accession number of the Coggin's test.

Persons transporting horses, mules or donkeys intrastate (within the same state) do not need to carry this paperwork.

Again, a person from out of state who wishes to bring their horses, mules or donkeys into Iowa must bring their paperwork, but a person from Iowa who is taking their horses to another part of Iowa does not need to bring their paperwork.

This applies to equestrian camping, day-use and trail riding in any Iowa State Parks, State Recreation Areas or State Forests.

County Managed State Parks

Some state parks are managed by local county conservation boards. If you do not find the name of the state park you are looking for in the list below please [click here](#) and you will be

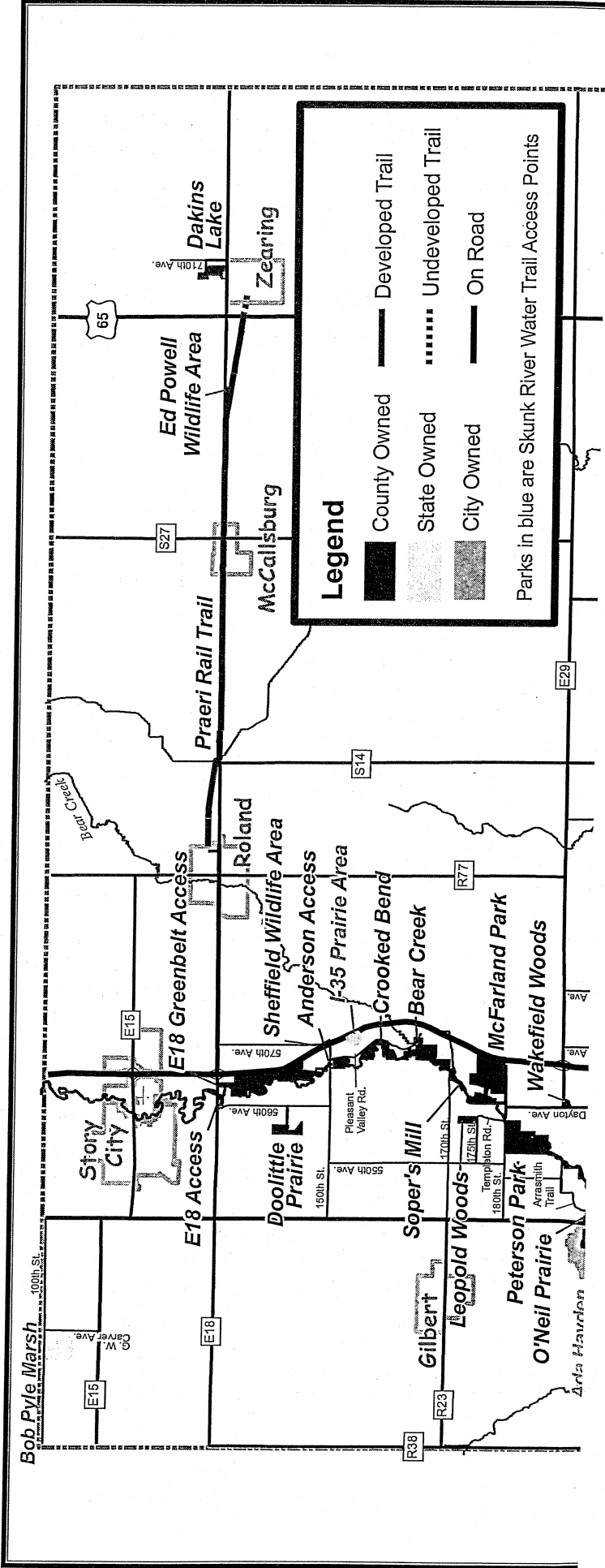
taken to a page listing those county managed state parks along with information on how to contact that county conservation board. For information on other county conservation board parks you can visit the [State Association of County Conservation Boards](#) web site.

Please be aware that facilities within county managed state parks are not on the State Parks reservation system.

| Name of Area | County | Nearby City | Phone Number |
|---|---------------|--------------------|---------------------|
| <u>Ambrose A. Call</u> | Kossuth | Algona | 515/295-3669 |
| <u>Backbone</u> | Delaware | Strawberry Pt. | 563/924-2527 |
| <u>Badger Creek</u> | Madison | Van Meter | 515/285-4502 |
| <u>Banner Lakes at Sunnyside</u> | Warren | Indianola | 515/961-7101 |
| <u>Beed's Lake</u> | Franklin | Hampton | 641/456-2047 |
| <u>Bellevue</u> | Jackson | Bellevue | 563/872-4019 |
| <u>Big Creek</u> | Polk | Polk City | 515/984-6473 |
| <u>Black Hawk</u> | Sac | Lake View | 712/657-8712 |
| <u>Brushy Creek</u> | Webster | Lehigh | 515/543-8298 |
| <u>Cedar Rock</u> | Buchanan | Quasqueton | 319/934-3572 |
| <u>Clear Lake</u> | Cerro Gordo | Clear Lake | 641/357-4212 |
| <u>Dolliver Memorial</u> | Webster | Lehigh | 515/359-2539 |
| <u>Elk Rock</u> | Marion | Knoxville | 641/842-6008 |
| <u>Elinor Bedell</u> | Dickinson | Spirit Lake | 712/337-3211 |
| <u>Emerson Bay</u> | Dickinson | Milford | 712/337-3211 |
| <u>Fairport Station</u> | Muscatine | Muscatine | 563/263-4337 |
| <u>Fort Atkinson</u> | Winneshiek | Fort Atkinson | 563/425-4161 |
| <u>Fort Defiance</u> | Emmet | Estherville | 712/337-3211 |
| <u>Geode</u> | Henry | Danville | 319/392-4601 |
| <u>George Wyth Memorial</u> | Black Hawk | Waterloo | 319/232-5505 |
| <u>Green Valley</u> | Union | Creston | 641/782-5131 |
| <u>Gull Point</u> | Dickinson | Milford | 712/337-3211 |
| <u>Honey Creek</u> | Appanoose | Moravia | 641/724-3739 |
| <u>Honey Creek Resort</u> | Appanoose | Moravia | 877-677-3344 |
| <u>Lacey-Keosauqua</u> | Van Buren | Keosauqua | 319/293-3502 |
| <u>Lake Ahquabi</u> | Warren | Indianola | 515/961-7101 |
| <u>Lake Anita</u> | Cass | Anita | 712/762-3564 |
| <u>Lake Darling</u> | Washington | Brighton | 319/694-2323 |
| <u>Lake Keomah</u> | Mahaska | Oskaloosa | 641/673-6975 |
| <u>Lake Macbride</u> | Johnson | Solon | 319/624-2200 |
| <u>Lake Manawa</u> | Pottawattamie | Council Bluffs | 712/366-0220 |
| <u>Lake of Three Fires</u> | Taylor | Bedford | 712/523-2700 |
| <u>Lake Wapello</u> | Davis | Drakesville | 641/722-3371 |
| <u>Ledges</u> | Boone | Boone | 515/432-1852 |
| <u>Lewis and Clark</u> | Monona | Onawa | 712/423-2829 |
| <u>Lower Gar Access</u> | Dickinson | Arnolds Park | 712/337-3211 |

| | | | |
|---|-------------------------|--------------------|--------------|
| <u>Maquoketa Caves</u> | Jackson | Maquoketa | 563/652-5833 |
| <u>Marble Beach</u> | Dickinson | Orleans | 712/337-3211 |
| <u>McIntosh Woods</u> | Cerro Gordo | Ventura | 641/829-3847 |
| <u>Mines of Spain & E.B. Lyons</u> | Dubuque | Dubuque | 563/556-0620 |
| <u>Mini-Wakan</u> | Dickinson | Spirit Lake | 712/337-3211 |
| <u>Nine Eagles</u> | Decatur | Davis City | 641/442-2855 |
| <u>Okamanpedan</u> | Emmet | Dolliver | 712/337-3211 |
| <u>Palisades-Kepler</u> | Linn | Mt. Vernon | 319/895-6039 |
| <u>Pikes Peak</u> | Clayton | McGregor | 563/873-2341 |
| <u>Pikes Point</u> | Dickinson | Spirit Lake | 712/337-3211 |
| <u>Pilot Knob</u> | Hancock | Forest City | 641/581-4835 |
| <u>Pine Lake</u> | Hardin | Eldora | 641/858-5832 |
| <u>Pleasant Creek</u> | Linn | Palo | 319/436-7716 |
| <u>Prairie Rose</u> | Shelby | Harlan | 712/773-2701 |
| <u>Preparation Canyon</u> | Monona | Moorhead | 712/423-2829 |
| <u>Red Haw</u> | Lucas | Chariton | 641/774-5632 |
| <u>Rice Lake</u> | Winnebago | Lake Mills | 641/581-4835 |
| <u>Rock Creek</u> | Jasper | Kellogg | 641/236-3722 |
| <u>Shimek Forest-campground</u> | Van Buren/Lee County | Farmington | 319/878-3811 |
| <u>Springbrook</u> | Guthrie | Guthrie Center | 641/747-3591 |
| <u>Stephens Forest- campground</u> | Lucas County | Chariton | 641/774-5632 |
| <u>Stone</u> | Plymouth | Sioux City | 712/255-4698 |
| <u>Templar Park</u> | Dickinson | Spirit Lake | 712/337-3211 |
| <u>Trappers Bay</u> | Dickinson | Spirit Lake | 712/337-3211 |
| <u>Twin Lakes</u> | Calhoun | Rockwell City | 712/297-7131 |
| <u>Union Grove</u> | Tama | Gladbrook | 641/473-2556 |
| <u>Viking Lake</u> | Montgomery | Stanton | 712/829-2235 |
| <u>Volga River</u> | Fayette | Fayette | 563/425-4161 |
| <u>Walnut Woods</u> | Polk | Des Moines | 515/285-4502 |
| <u>Wapsipinicon</u> | Jones | Anamosa | 319/462-2761 |
| <u>Waubonsie</u> | Fremont | Sidney | 712/382-2786 |
| <u>Wildcat Den</u> | Muscatine | Muscatine | 563/263-4337 |
| <u>Wilson Island</u> | Pottawattamie | Loveland | 712/642-2069 |
| <u>Yellow River-campground</u> | Allamakee | Waukon Junction | 563/873-2341 |





Story County Conservation
 56461 180th Street
 Ames, Iowa 50010
 515-232-2516; 515-232-6989 (fax)
 www.storycountyconservation.org

| Public Area | Acage | Archery Range | Boat Ramp | Camping | Concession Stand | Fishing | Hunting | Open Shelter | Picnicking | Playground | Restrooms-Flush* | Restrooms-pit* | River Access | Showers | Snowmobiling | Swimming | Trail - Biking | Trail - Hiking | Trail - Equestrian | |
|------------------------------|-------|---------------|-----------|---------|------------------|---------|---------|--------------|------------|------------|------------------|----------------|--------------|---------|--------------|----------|----------------|----------------|--------------------|--|
| 265th Street Bridge Access | 1 | | | | | • | | | | | | • | | | | | | | | |
| Anderson Access | 2 | | | | | • | | | | | | • | | | | | | | | |
| Askew Bridge/Cambridge Pond | 15 | | | | | • | | | | | | • | | | | | | | | |
| Bear Creek | 93 | | | | | • | | | | | | • | | | | | | | | |
| Christiansen Forest Preserve | 50 | | | | | • | | | | | | • | | | | | | | | |
| Cooper's Prairie Marsh | 10 | | | | | • | | | | | | • | | | | | | | | |
| Crooked Bend | 66 | | | | | • | | | | | | • | | | | | | | | |
| Dakins Lake | 41 | | • | | | • | | | | | | • | | | | | | | | |
| Doolittle Prairie | 43 | | | | | • | | | | | | • | | | | | | | | |
| E-18 Access | 10 | | | | | • | | | | | | • | | | | | | | | |
| E-18 Greenbelt Access | 235 | | | | | • | | | | | | • | | | | | | | | |
| Heart of Iowa Nature Trail | 500 | | | | | • | | | | • | | • | | | | | | • | • | |
| Hickory Grove Park | 445 | | | | | • | | | | • | | • | | | | | | | | |
| I-35 Prairie View Area | 4 | | | | | • | | | | | | • | | | | | | | | |
| Jim Ketelsen Greenwing Marsh | 68 | | | | | • | | | | | | • | | | | | | | | |
| Larson Marsh | 12 | | | | | • | | | | | | • | | | | | | | | |
| McFarland Park | 240 | | | | | • | | | | • | | • | | | | | | | | |
| Peterson Park | 199 | | | | | • | | | | • | | • | | | | | | | | |
| Praeri Rail Trail | 124 | | | | | • | | | | | | • | | | | | | | | |
| Robison Wildlife Acres | 78 | | | | | • | | | | | | • | | | | | | | | |
| Shreck Access | 3.1 | | | | | • | | | | | | • | | | | | | | | |
| Skunk River Flats | 117 | | | | | • | | | | | | • | | | | | | | | |
| Sleepy Hollow Access | 13 | | | | | • | | | | | | • | | | | | | | | |
| Soper's Mill | 16 | | | | | • | | | | | | • | | | | | | | | |
| Wakefield Woods | 10 | | | | | • | | | | | | • | | | | | | | | |

* Some restrooms available only during summer months. Modern restrooms available at McFarland Park during office hours.

Appendix J
CIVIL RIGHTS IMPACT ANALYSIS

DP-1: Profile of General Demographic Characteristics: 2000
Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data
Geographic Area: Story County, Iowa

NOTE: For information on confidentiality protection, nonsampling error, definitions, and count corrections see <http://factfinder.census.gov/home/en/datanotes/expsf1u.htm>.

□

| Subject | Number | Percent |
|--|---------------|------------|
| Total population | 79,981 | 100 |
| RACE | | |
| One race | 79,072 | 98.9 |
| White | 72,898 | 91.1 |
| Black or African American | 1,463 | 1.8 |
| American Indian and Alaska Native | 128 | 0.2 |
| Asian | 4,080 | 5.1 |
| Asian Indian | 651 | 0.8 |
| Chinese | 1,595 | 2 |
| Filipino | 111 | 0.1 |
| Japanese | 132 | 0.2 |
| Korean | 765 | 1 |
| Vietnamese | 166 | 0.2 |
| Other Asian 1 | 660 | 0.8 |
| Native Hawaiian and Other Pacific Islander | 25 | 0 |
| Native Hawaiian | 11 | 0 |
| Guamanian or Chamorro | 2 | 0 |
| Samoan | 6 | 0 |
| Other Pacific Islander 2 | 6 | 0 |
| Some other race | 478 | 0.6 |
| Two or more races | 909 | 1.1 |
| Race alone or in combination with one or more other races 3 | | |
| White | 73,665 | 92.1 |
| Black or African American | 1,701 | 2.1 |
| American Indian and Alaska Native | 351 | 0.4 |
| Asian | 4,439 | 5.6 |
| Native Hawaiian and Other Pacific Islander | 71 | 0.1 |
| Some other race | 713 | 0.9 |
| HISPANIC OR LATINO AND RACE | | |
| Total population | 79,981 | 100 |
| Hispanic or Latino (of any race) | 1,238 | 1.5 |
| Mexican | 601 | 0.8 |
| Puerto Rican | 169 | 0.2 |
| Cuban | 28 | 0 |
| Other Hispanic or Latino | 440 | 0.6 |
| Not Hispanic or Latino | 78,743 | 98.5 |
| White alone | 72,221 | 90.3 |

(X) Not applicable

1 Other Asian alone, or two or more Asian categories.

2 Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

3 In combination with one or more other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices P1, P3, P4, P8, P9, P12, P13, P,17, P18, P19, P20, P23, P27, P28, P33, PCT5, PCT8, PCT11, PCT15, H1, H3, H4, H5, H11, and H12.

Appendix L
ENDANGERED SPECIES

Iowa List of Federally Endangered, Threatened, Proposed, and Candidate Species - by County

If you have questions about this list, please contact our Illinois Field Office at:
U.S. Fish and Wildlife Service, 1511 47th Avenue, Moline, Illinois 61265
Phone: (309) 757-5800
Revised September 2007

| County | Common Name | Scientific Name | Status | Habitat |
|-----------|--------------------------------|-------------------------------|------------|---|
| Adair | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Mead's milkweed | <i>Asclepias meadii</i> | Threatened | Virgin prairies |
| | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| Adams | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Allamakee | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Northern monkshood | <i>Aconitum novaboracense</i> | Threatened | |
| | Higgins eye pearlymussel | <i>Lampsilis higginsii</i> | Endangered | Mississippi River |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | Rivers |
| Appanoose | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Audubon | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Benton | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |

| County | Common Name | Scientific Name | Status | Habitat |
|-----------|--------------------------------|-------------------------------|------------|--|
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Cherokee | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Chickasaw | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Clarke | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging) |
| | Mead's milkweed | <i>Asclepias meadii</i> | Threatened | |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | |
| Clay | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Clayton | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Northern monkshood | <i>Aconitum novaboracense</i> | Threatened | |
| | Higgins eye pearl mussel | <i>Lampsilis higginsii</i> | Endangered | Mississippi River |
| | Iowa Pleistocene snail | <i>Discus macclintocki</i> | Endangered | North-facing algific talus slopes of the driftless area |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | Rivers |
| | Spectaclecase mussel | <i>Cumberlandia monodonta</i> | Candidate | Rivers |
| Clinton | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Higgins eye pearl mussel | <i>Lampsilis higginsii</i> | Endangered | Mississippi River |
| | Iowa Pleistocene snail | <i>Discus macclintocki</i> | Endangered | North-facing algific talus slopes of the driftless area |
| Crawford | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |

| County | Common Name | Scientific Name | Status | Habitat |
|----------|--------------------------------|-------------------------------|------------|--|
| | Dakota skipper | <i>Hesperia dacotae</i> | Candidate | Prairies |
| Dubuque | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Northern monkshood | <i>Aconitum novaboracense</i> | Threatened | |
| | Higgins eye pearl mussel | <i>Lampsilis higginsii</i> | Endangered | Mississippi River |
| | Iowa Pleistocene snail | <i>Discus macclintocki</i> | Endangered | North-facing algific talus slopes of the driftless area |
| | Spectaclecase mussel | <i>Cumberlandia monodonta</i> | Candidate | Rivers |
| Emmet | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Fayette | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Iowa Pleistocene snail | <i>Discus macclintocki</i> | Endangered | North-facing algific talus slopes of the driftless area |
| Floyd | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Franklin | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Fremont | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging) |
| | pallid sturgeon | <i>Scaphirhynchus albus</i> | Endangered | Large rivers |
| Greene | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Topeka shiner | <i>Notropis topeka</i> | Endangered | Prairie streams and rivers |
| Grundy | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Guthrie | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |

| County | Common Name | Scientific Name | Status | Habitat |
|-----------|--------------------------------|-------------------------------|------------|---|
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Jackson | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Eastern prairie fringed orchid | <i>Platanthera leucophaea</i> | Threatened | Mesic to wet prairies |
| | Northern monkshood | <i>Aconitum novaboracense</i> | Threatened | |
| | Higgins eye pearlymussel | <i>Lampsilis higginsii</i> | Endangered | Mississippi River |
| | Iowa Pleistocene snail | <i>Discus macclintocki</i> | Endangered | North-facing algific talus slopes of the driftless area |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | Rivers |
| Jasper | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Jefferson | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Johnson | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Eastern prairie fringed orchid | <i>Platanthera leucophaea</i> | Threatened | Mesic to wet prairies |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | Rivers |
| | Eastern massasauga | <i>Sistrurus c. catenatus</i> | Candidate | |

| County | Common Name | Scientific Name | Status | Habitat |
|----------|--------------------------------|-------------------------------|------------|---|
| | Eastern massasauga | <i>Sistrurus c. catenatus</i> | Candidate | |
| Lucas | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | Rivers |
| Lyon | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Topeka shiner | <i>Notropis topeka</i> | Endangered | Prairie streams and rivers |
| Madison | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Mahaska | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Marion | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Marshall | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Mills | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |

| County | Common Name | Scientific Name | Status | Habitat |
|---------------|--------------------------------|-------------------------------|------------|---|
| | Eastern massasauga | <i>Sistrurus c. catenatus</i> | Candidate | |
| O'Brien | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Osceola | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Topeka shiner | <i>Notropis topeka</i> | Endangered | Prairie streams and rivers |
| Page | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Palo Alto | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Plymouth | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Pocahontas | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Polk | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| | Least tern | <i>Sterna antillarum</i> | Endangered | Bare alluvial and dredged spoil islands |
| | Sheepnose mussel | <i>Plethobasus cyphus</i> | Candidate | Rivers |
| Pottawattamie | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |

| County | Common Name | Scientific Name | Status | Habitat |
|-----------|--------------------------------|-------------------------------|------------|---|
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Sioux | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Story | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Tama | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| Taylor | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Union | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Van Buren | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Wapello | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Indiana bat | <i>Myotis sodalis</i> | Endangered | Caves, mines (hibernacula);small stream corridors with well developed riparian woods; upland forests (foraging) |
| Warren | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |

| County | Common Name | Scientific Name | Status | Habitat |
|--------|--------------------------------|-------------------------------|------------|--|
| Wright | Western prairie fringed orchid | <i>Platanthera praeclara</i> | Threatened | Wet prairies and sedge meadows |
| | Prairie bush clover | <i>Lespedeza leptostachya</i> | Threatened | Dry to mesic prairies with gravelly soil |
| | Topeka shiner | <i>Notropis topeka</i> | Endangered | Prairie streams and rivers |

Revised September 2007

1

Appendix M
FLOODPLAIN



MAP SCALE 1" = 1000'

500 0 1000 2000

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD



The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Area of special hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance of greater flood event.

ZONE A99 Areas to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.



FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.



OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.



OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0170E

FIRM
FLOOD INSURANCE RATE MAP
STORY COUNTY,
IOWA
AND INCORPORATED AREAS

PANEL 170 OF 500
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

| CONTAINS: | NUMBER | PANEL | SUFFIX |
|-----------------|--------|-------|--------|
| COMMUNITY | 180254 | 0170 | E |
| AMES, CITY OF | 190907 | 0170 | E |
| STORY COUNTY | 180259 | 0170 | E |
| NEWADA, CITY OF | | | |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
19169C0170E

EFFECTIVE DATE
FEBRUARY 20, 2008

Federal Emergency Management Agency

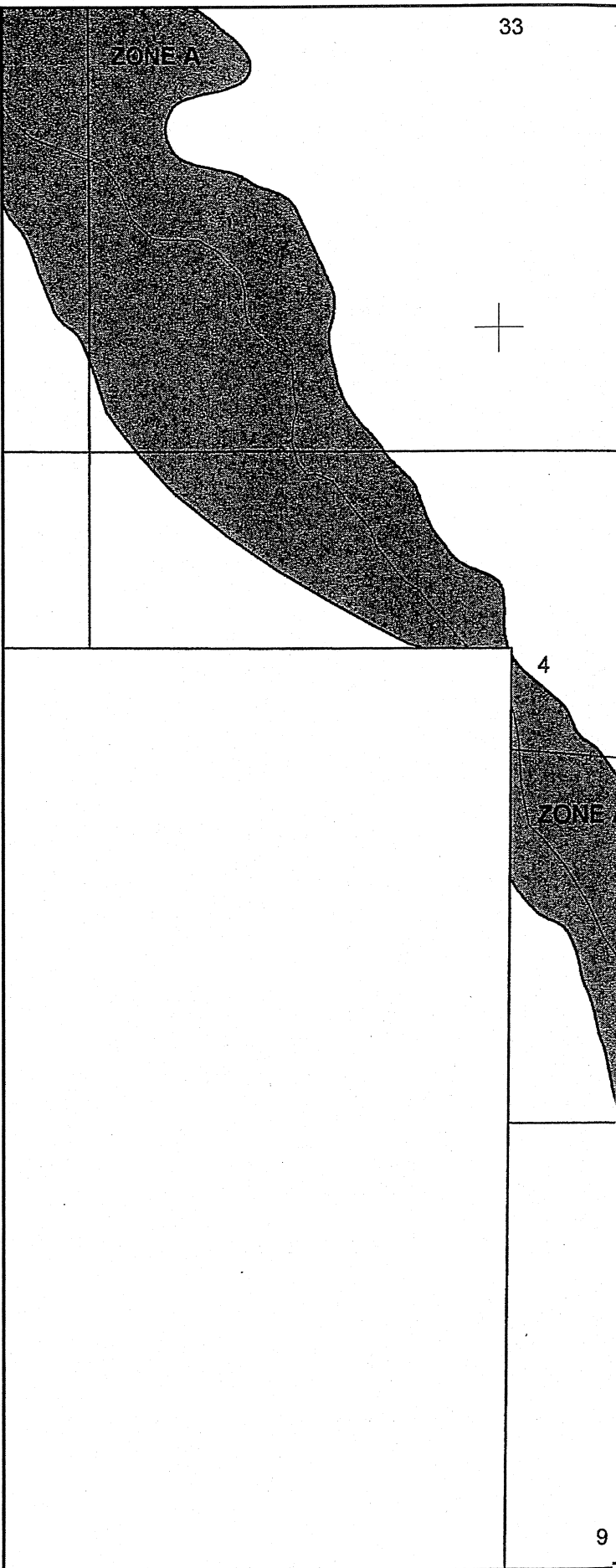
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Insurance Program at 1-800-638-6620.



MAP SCALE 1" = 1000'

500 0 1000 2000



PANEL 0170E

FIRM
FLOOD INSURANCE RATE MAP
STORY COUNTY,
IOWA
AND INCORPORATED AREAS

PANEL 170 OF 500
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| <u>COMMUNITY</u> | <u>NUMBER</u> | <u>PANEL</u> | <u>SUFFIX</u> |
|------------------|---------------|--------------|---------------|
| AMES, CITY OF | 190254 | 0170 | E |
| STORY COUNTY | 190907 | 0170 | E |
| NEVADA, CITY OF | 190258 | 0170 | E |

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MAP NUMBER
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DEPARTMENT OF HOMELAND SECURITY
 FEDERAL EMERGENCY MANAGEMENT AGENCY
STANDARD FLOOD HAZARD DETERMINATION FORM (SFHDF)

See The Attached
 Instructions

O.M.B. No. 1660-0040
 Expires December 31, 2011

SECTION I - LOAN INFORMATION

| | | | |
|----------------------------|---|---------------------------------------|--|
| 1. LENDER NAME AND ADDRESS | 2. COLLATERAL (Building/Mobile Home/Personal Property) PROPERTY ADDRESS (Legal Description may be attached) <i>Lincolnway Energy, LLC 59511 West Lincoln Hwy Nevada, IA 50201</i> | | |
| 3. LENDER ID NO. | 4. LOAN IDENTIFIER | 5. AMOUNT OF FLOOD INSURANCE REQUIRED | |

SECTION II

| A. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) COMMUNITY JURISDICTION | | | | |
|--|--|--|---|----------------|
| 1. NFIP Community Name <i>City of Nevada</i> | 2. County(ies) <i>Story</i> | 3. State <i>IA</i> | 4. NFIP Community Number <i>19025B</i> | |
| B. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) DATA AFFECTING BUILDING/MOBILE HOME | | | | |
| 1. NFIP Map Number or Community-Panel Number (Community name, if not the same as "A") <i>Story County, Iowa 19169C017E</i> | 2. NFIP Map Panel Effective/ Revised Date <i>February 20, 2008</i> | 3. LOMA/LOMR <input type="checkbox"/> YES Date | 4. Flood Zone <i>"X"</i> | 5. No NFIP Map |

C. FEDERAL FLOOD INSURANCE AVAILABILITY (Check all that apply)

1. Federal Flood Insurance is available (Community participates in NFIP). Regular Program Emergency Program of NFIP

2. Federal Flood Insurance is not available because community is not participating in the NFIP.

3. Building/Mobile Home is in a Coastal Barrier Resources Area (CBRA) or Otherwise Protected Area (OPA). Federal Flood Insurance may not be available.

CBRA/OPA Designation Date: *N/A*

D. DETERMINATION

IS BUILDING/MOBILE HOME IN SPECIAL FLOOD HAZARD AREA (ZONES CONTAINING THE LETTERS "A" OR "V")? YES NO

If yes, flood insurance is required by the Flood Disaster Protection Act of 1973.
 If no, flood insurance is not required by the Flood Disaster Protection Act of 1973.

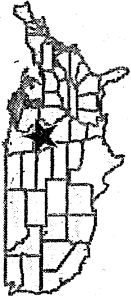
E. COMMENTS (Optional)

None

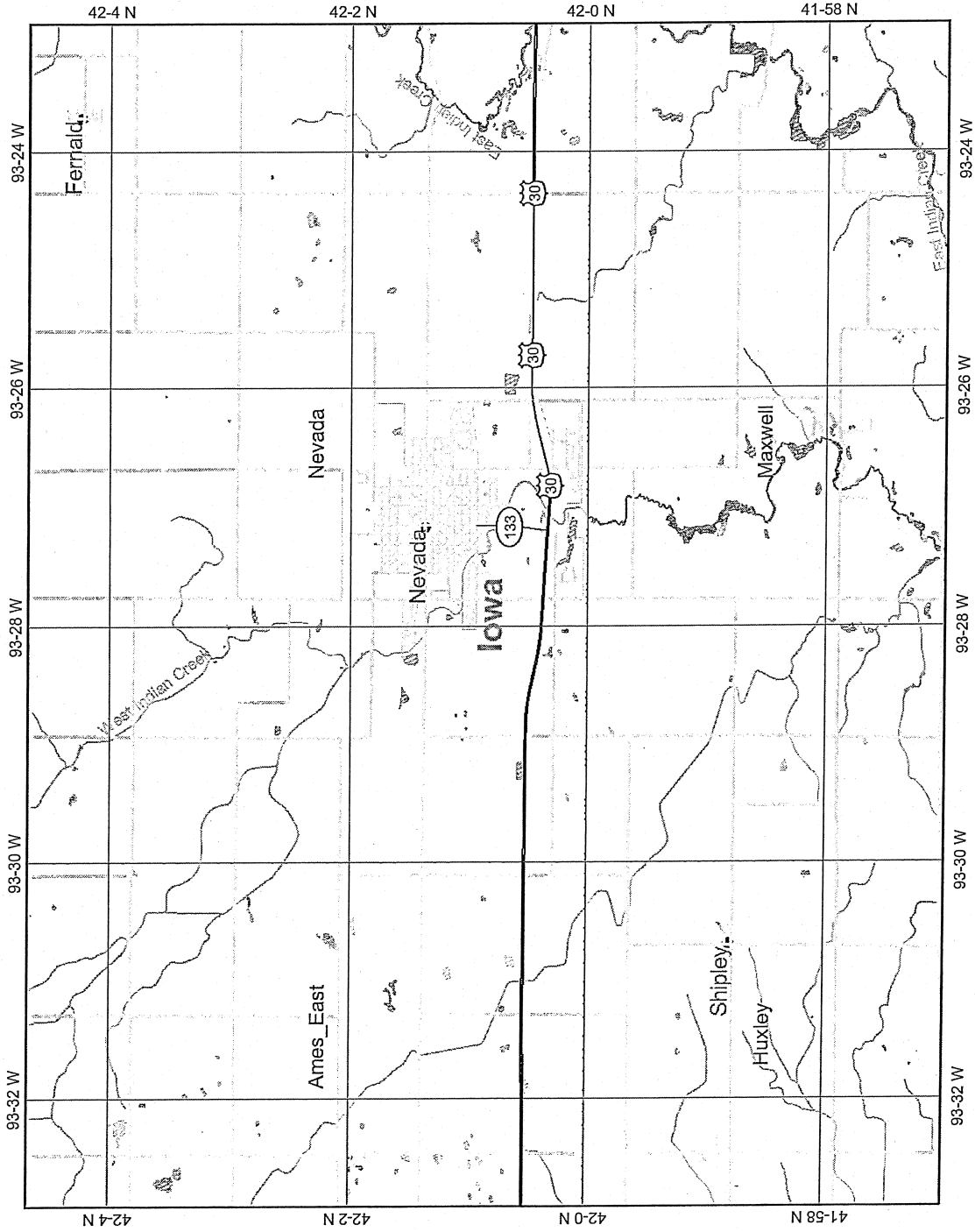
This determination is based on examining the NFIP map, any Federal Emergency Management Agency revisions to it, and any other information needed to locate the building/mobile home on the NFIP map.

| | |
|---|--|
| F. PREPARER'S INFORMATION NAME, ADDRESS, TELEPHONE NUMBER (If other than Lender) <i>John L. Frankfort Barber & Frankfort Engineering Consultants 1801 Industrial Circle West Des Moines, IA 50265</i> | DATE OF DETERMINATION <i>October 6, 2009</i> |
|---|--|

Appendix N
WETLANDS



- Interstate
- Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Roads
- Cities
- USGS Quad Index 24K
- Lower 48 Wetland Polygons
 - Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other
 - Riverine
- NHD Streams
- Counties 100K
- Urban Areas 300K
- States 100K
- South America
- North America



Hydric Soils

Story County, Iowa

| Map symbol and map unit name | Component | Percent of map unit | Landform | Hydric rating | Hydric criteria |
|---|------------------------------|---------------------|-----------------|---------------|-----------------|
| 6: Okoboji silty clay loam, 0 to 1 percent slopes | Okoboji, ponded | 95 | Ground moraines | Yes | 2B3, 3 |
| | Harps | 5 | Ground moraines | Yes | 2B3 |
| 27B: Terril loam, 2 to 5 percent slopes | Coland, frequently flooded | 5 | Flood plains | Yes | 2B3 |
| 54: Zook silty clay loam, 0 to 2 percent slopes | Zook, occasionally flooded | 95 | Flood plains | Yes | 2B3 |
| | Zook, frequently flooded | 5 | Flood plains | Yes | 2B3, 3, 4 |
| 55: Nicollet loam, 1 to 3 percent slopes | Okoboji, ponded | 5 | Ground moraines | Yes | 2B3, 3 |
| 90: Okoboji mucky silt loam, 0 to 1 percent slopes | Okoboji, ponded | 95 | Ground moraines | Yes | 2B3, 3 |
| | Harps | 5 | Ground moraines | Yes | 2B3 |
| 95: Harps loam, 1 to 3 percent slopes | Harps | 95 | Ground moraines | Yes | 2B3 |
| | Okoboji, ponded | 5 | Ground moraines | Yes | 2B3, 3 |
| 107: Webster clay loam, 0 to 2 percent slopes | Webster | 90 | Ground moraines | Yes | 2B3 |
| | Okoboji, ponded | 10 | Ground moraines | Yes | 2B3, 3 |
| 135: Coland clay loam, 0 to 2 percent slopes | Coland, frequently flooded | 95 | Flood plains | Yes | 2B3 |
| | Havelock, frequently flooded | 5 | Flood plains | Yes | 2B3, 3, 4 |
| 168B: Hayden loam, 2 to 5 percent slopes | Cordova | 5 | Ground moraines | Yes | 2B3 |
| | Okoboji, ponded | 5 | Ground moraines | Yes | 2B3, 3 |
| 201B: Coland-Terril complex, 1 to 5 percent slopes | Coland, occasionally flooded | 65 | Drainageways | Yes | 2B3 |

Hydric Soils

Story County, Iowa

| Map symbol and map unit name | Component | Percent of map unit | Landform | Hydric rating | Hydric criteria |
|---|--|---------------------|-----------------|---------------|-----------------|
| 202: Cylinder loam, 24 to 32 inches to sand and gravel, 0 to 2 percent slopes | Biscay | 5 | Stream terraces | Yes | 2B3 |
| 203: Cylinder loam, 32 to 40 inches to sand and gravel, 0 to 2 percent slopes | Biscay | 5 | Stream terraces | Yes | 2B3 |
| 221: Palms muck, 0 to 1 percent slopes | Palms, ponded | 95 | Depressions | Yes | 1, 3 |
| | Houghton, ponded | 5 | Depressions | Yes | 1, 3 |
| 236C: Lester loam, 5 to 9 percent slopes | Okoboji, ponded | 5 | Ground moraines | Yes | 2B3, 3 |
| | Webster | 5 | Ground moraines | Yes | 2B3 |
| | Cordova | 3 | Ground moraines | Yes | 2B3 |
| 236C2: Lester loam, 5 to 9 percent slopes, moderately eroded | Cordova | 2 | Ground moraines | Yes | 2B3 |
| | Okoboji, ponded | 2 | Ground moraines | Yes | 2B3, 3 |
| | Webster | 1 | Ground moraines | Yes | 2B3 |
| 236F: Lester loam, 18 to 25 percent slopes | Coland, frequently flooded | 5 | Drainageways | Yes | 2B3 |
| 259: Biscay clay loam, 32 to 40 inches to sand and gravel, 0 to 2 percent slopes | Biscay, 32 to 40 inches to sand and gravel | 95 | Stream terraces | Yes | 2B3 |
| | Biscay, ponded | 5 | Stream terraces | Yes | 2B3, 3 |
| 274: Rolfe loam, 0 to 1 percent slopes | Rolfe, ponded | 100 | Ground moraines | Yes | 2B3, 3 |
| 288: Ottosen clay loam, 1 to 3 percent slopes | Kossuth | 5 | Drainageways | Yes | 2B3 |
| 386: Cordova clay loam, 0 to 2 percent slopes | Cordova | 90 | Ground moraines | Yes | 2B3 |

Hydric Soils

Story County, Iowa

| Map symbol and map unit name | Component | Percent of map unit | Landform | Hydric rating | Hydric criteria |
|---|--|---------------------|-----------------|---------------|-----------------|
| 388: Kossuth silty clay loam, 0 to 2 percent slopes | Kossuth | 95 | Drainageways | Yes | 2B3 |
| | Okoboji, ponded | 5 | Ground moraines | Yes | 2B3, 3 |
| 485: Spillville loam, 0 to 2 percent slopes | Coland, frequently flooded | 5 | Flood plains | Yes | 2B3 |
| 506: Wacousta silty clay loam, 0 to 1 percent slopes | Wacousta, ponded | 100 | Ground moraines | Yes | 2B3, 3 |
| 507: Canisteo clay loam, 0 to 2 percent slopes | Canisteo | 95 | Ground moraines | Yes | 2B3 |
| | Okoboji, ponded | 5 | Ground moraines | Yes | 2B3, 3 |
| 536: Hanlon fine sandy loam, 0 to 2 percent slopes | Havelock, occasionally flooded | 10 | Flood plains | Yes | 2B3 |
| 559: Talcot clay loam, 32 to 40 inches to sand and gravel, 0 to 2 percent slopes | Talcot, 32 to 40 inches to sand and gravel | 100 | Stream terraces | Yes | 2B3 |
| 956: Harps-Okoboji complex, 0 to 2 percent slopes | Harps | 60 | Ground moraines | Yes | 2B3 |
| | Okoboji, ponded | 40 | Ground moraines | Yes | 2B3, 3 |
| 1314: Hanlon-Spillville complex, channeled, 0 to 2 percent slopes | Coland, channeled, frequently flooded | 5 | Flood plains | Yes | 2B3, 3, 4 |
| | Spillville, channeled, frequently flooded | 5 | Flood plains | Yes | 4 |
| 1585: Spillville-Coland complex, channeled, 0 to 2 percent slopes | Coland, channeled, frequently flooded | 30 | Flood plains | Yes | 2B3 |
| | Coland, channeled, frequently flooded | 5 | Flood plains | Yes | 2B3, 3, 4 |
| | Spillville, channeled, frequently flooded | 5 | Flood plains | Yes | 4 |

Explanation of hydric criteria codes:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or

Hydric Soils

B. are poorly drained or very poorly drained and have either:

- 1.) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - 2.) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - 3.) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
 4. Soils that are frequently flooded for long or very long duration during the growing season.