

**PLANNING & DEVELOPMENT**

518 West Fourth Street  
Davenport, Iowa 52801-1106  
E-mail: [planning@scottcountyiowa.com](mailto:planning@scottcountyiowa.com)  
Office: (563) 326-8643 Fax: (563) 326-8257



---

Timothy Huey  
Director

To: Dee F. Bruemmer, County Administrator

From: Timothy Huey, Planning Director

Date: July 10, 2012

**Re: County review and public hearing on the Construction Permit Application of Kent Paustian, dba Paustian Enterprises Ltd. in the SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> Section 30, T79N, R2E (Hickory Grove Township) for new nursery building at an existing confined animal (hog) feeding operation located at 6520 215<sup>th</sup> Street.**

On June 22<sup>nd</sup> the above referenced application was submitted to the Iowa DNR. Scott County has 30 days from that date to submit comments and a recommendation on that application. Notice of the receipt of this application also must be published a public notice. A public hearing was also set for the Board meeting on July 19<sup>th</sup> to take comments from the public. Staff has published both the notice of receipt of application and notice of the public hearing.

The State construction permit application submitted by Paustian Enterprises to the Iowa DNR is for new nursery building at an existing hog confinement operation in Hickory Grove Township. The proposed project is to reduce overcrowding in the nursery facilities and does not require compliance with the standards of the Master Matrix because the nursery building will not expand the capacity of the operation. The existing confined animal feeding operation has a capacity of 1,120 animal unit (AU) the proposed new nursery building would not add any additional capacity and the total animal unit capacity would remain at 1,120 AU. The building will be 59 feet by 62 feet and constructed over an 8 foot deep form concrete manure storage pit..

The site meets the distance requirements for water sources and designated wetlands. Because the building site is within the existing envelope meets all required setbacks from adjacent features.

Health Department Staff accompanied the IDNR inspector from the Washington, Iowa district office on the inspection of the site last week. A copy of the Health Department's review of this application is included.

Staff has not, as of yet, received any calls or comments on this request. Staff will include any written comments and a summary of any verbal comments received at the public hearing with the Board's recommendation to the IDNR.

Staff will make a recommendation following the public hearing at the Thursday Board meeting.



PRINTED ON 30%  
POST CONSUMER  
RECYCLED PAPER

542-1352.4



# STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR  
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
CHUCK GIPP, DIRECTOR

June 22, 2012

Scott County Board of Supervisors  
c/o County Auditor  
Via facsimile only

**REF: Public Notice Required, DNR's Facility ID No. 62366**

Dear Board of Supervisors:

The DNR has received a construction permit application for a confinement feeding operation:  
Facility name: Home Farm  
Date received: 06/22/2012

Under Iowa law, for this application the County is required to complete the following actions:

1. Publish a public notice (see example on page following this letter) in a newspaper having a general circulation in the county no later than 07/09/2012 (within 14 days of DNR's receipt of the application) and submit proof of publication to the DNR:

**Note:** A public hearing is not required, but it is optional. However, if the board chooses to have a public hearing, it is recommended to include in the notice the date, time and place for the hearing.

2. The board may submit comments or may forward comments from the public, which must be received by DNR no later than 07/25/2012. Comments received after that date due will not be considered. Comments may include but are not limited to the following:
  - a. The existence of an object or location not included in the application that benefits from a separation distance requirement as provided in section 459.202 or 459.204 or 459.310 of the Code of Iowa.
  - b. The suitability of soils and the hydrology of the site where construction of a confinement feeding operation structure is proposed.
  - c. The availability of land for the application of manure originating from the confinement feeding operation.
  - d. Whether the construction of a proposed confinement feeding operation structure will impede drainage through established tile lines, laterals, or other improvements which are constructed to facilitate the drainage of land not owned by the person applying for the construction permit.

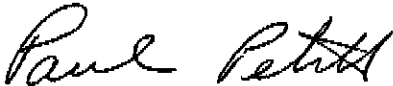
3. The proof of publication and any public comments must be received by IDNR no later than 07/25/2012 by mail, fax or email.

Send to: Iowa DNR FO #3  
1900 N Grand Ave  
Gateway North, Suite E17  
Spencer, IA 51301  
Attn: Paul Petitti  
Paul.Petitti@dnr.iowa.gov

If you have any questions about this process, please contact Paul at (712) 262-4177.

Sincerely,

ENVIRONMENTAL SERVICES DIVISION



Paul Petitti

Environmental Services Division

# PUBLIC NOTICE

*(This section is to be completed by the applicant)*

The Scott County Board of Supervisors, has received a construction permit application for a confinement feeding operation, more specifically described as follows:

Name of Applicant: Paustian Enterprises Ltd.

Location of the operation: Section 30, Hickory Grove Township.

Type of confinement feeding operation structure proposed: One new 1000 head deep pit swine nursery barn to replace an existing barn at an existing facility.

Animal Unit Capacity Of The Operation after Expansion: Unchanged at 1120 animal units.(2100 head of finishing swine and 2800 head of nursery swine)

*(This section is to be completed by the county)*

Examination: The application is on file at the County \_\_\_\_\_ Office and is available for public inspection during the following days: \_\_\_\_\_ and hours: \_\_\_\_\_ am to \_\_\_\_\_ pm.

Comments: Written comments may be filed at the County \_\_\_\_\_ Office, until the following deadline: \_\_\_\_\_.

‡ A confinement feeding operation structure = a confinement building with a below the floor concrete pit; confinement building with an earthen basin or anaerobic lagoon; aboveground steel tank, etc. (see definition in footnote 1, page 1 of this application form).



Iowa Department of Natural Resources  
1900 North Grand Ave.  
Gateway N Mall, Suite E17  
Spencer, Iowa 51301

## FAX SHEET

**DELIVER TO:** Scott County Auditor **PHONE:** 1-563-326-8643

**FAX NUMBER:** 1-563-326-8257

**FROM:** Iowa DNR, Paul Petitti

**NUMBER OF PAGES (including this cover sheet):** 4

**MESSAGE:** This is a courtesy reminder: Iowa law requires that your board of supervisors publish a notice in the newspaper for the construction permit application of the confinement feeding operation, as explained in the attached letter. Please take note of the deadlines. If you have any question, please call.

**Our Fax Number is: 712/262-2901**

**Any problems with transmission call: 712/262-4177**

**Construction Permit Application Package**  
**Paustian Enterprises, Ltd. – Home Farm**

Contents

1. Construction Permit Application
2. Manure Storage Indemnity Fee Form
3. Filing Fees Form for Construction Permits
4. County Verification Receipt of DNR Construction Permit App.
5. Plat Map
6. Aerial & Site Maps
7. Minimum required separation distances
8. Alluvial and Karst Determination and Map
9. Construction Design Statement
10. Manure Management Plan



# Iowa Department of Natural Resources

## Construction Permit Application Form Confinement Feeding Operations

### INSTRUCTIONS:

Prior to constructing, installing, modifying or expanding a confinement feeding operation structure<sup>1</sup>, answer questions 1-8 on Item 3, Section A (page 2), to determine if a construction permit is required. To calculate the animal unit capacity (AUC) of the operation, complete Table 1 (page 4.) If a construction permit is required, complete the rest of the form, have the owner(s) sign it on pages 5 and 6. Mail to the DNR (see address on page 5) this application form, documents and fees requested in Checklist No. 1 or 2 (pages 10-16). See item 5 (page 5), to determine which checklist to use.

If a construction permit is not needed, some pre-construction requirements may still apply prior to the construction of a formed manure storage structure<sup>2</sup>. See page 5 for additional DNR contact information.

### THIS APPLICATION IS FOR:

1.  A new confinement feeding operation
2.  An existing confinement feeding operation (answer all of the following questions):
  - a. Facility ID No. (5 digit number): 62366
  - b. Date when the operation was first constructed: 1970
  - c. Date when the last construction, expansion or modification was completed: 1994.  
(Not needed if the confinement operation has previously received a construction permit from DNR.)
  - d. Is this also an ownership change?  Yes.  No.

### ITEM 1 - LOCATION AND CONTACT INFORMATION (See page 17 for instructions and an example):

A) Name of operation: Home Farm

Location:	<u>SW</u>	<u>NE</u>	<u>30</u>	<u>79N &amp; 2E</u>	<u>Hickory Grove</u>	<u>Scott</u>
	(1/4 1/4)	(1/4)	(Section)	(Tier & Range)	(Name of Township)	(County)

#### B) Owner information:

Name: Paustian Enterprises Ltd. Title: Owner

Address: 6520 - 215<sup>th</sup> St, Walcott, IA 52773

Telephone: 563-284-6814 Fax: \_\_\_\_\_ Email: mike.paustian@gmail.com

#### C) Person to contact with questions about this application (if different than owner):

Name: Kent Paustian Title: Owner

Address: 6520 - 215<sup>th</sup> St, Walcott, IA 52773

Telephone: 563-284-6814 Fax: \_\_\_\_\_ Email: mike.paustian@gmail.com

Enclose aerial photo or engineering drawing showing the proposed location of the confinement feeding operation structure<sup>1</sup> and all applicable separation distances, as requested in Attachment 1 (pages 11 or 14). See example of aerial photo on pages 18 to 19, at the end of this form.

I manage or am the majority owner of another confinement feeding operation located within 2,500 feet of the proposed site. Please contact the DNR-AFO Program staff at (515) 281-8941 to verify site adjacency requirements.

<sup>1</sup> Confinement feeding operation structure = animal feeding operation structure (confinement building, manure storage structure or egg washwater storage structure) that is part of a confinement feeding operation. Manure storage structures include formed and unformed manure storage structures.

<sup>2</sup> Formed manure storage structure = covered or uncovered concrete or steel tanks, and concrete pits below the building.

## ITEM 2 – SITING INFORMATION:

- A) Karst Determination: Go to [www.IowaDNR.gov](http://www.IowaDNR.gov) select the link to 'Mapping (GIS Interactive)', then check the [AFO Siting Atlas](#). If the site is not located in karst or potential karst, print and enclose the map with the name and location of the site clearly marked. If the site is in karst or potential karst, if you cannot access the map, or if you have questions about this issue, contact a DNR geologist at (515) 242-6848. Check one of the following:
- The site is not in karst or potential karst. Include documentation requested in checklist 1 or 2 (pages 10 or 13).
  - The DNR geologist has verified that the site is in karst. The upgraded concrete standards of 567 IAC 65.15(14)"c" must be used.
- B) Alluvial Soils Determination: Go to [www.IowaDNR.gov](http://www.IowaDNR.gov), select the link to 'Mapping (GIS Interactive)', then check the [AFO Siting Atlas](#). If the site is not in potential alluvial soils, print and enclose the map with the name and location of the site clearly marked. If the site is in potential alluvial soils, if you cannot access the map, or if you have questions about this issue, contact a DNR geologist at (515) 242-6848. Check one of the following:
- The site is not in alluvial soils. Include documentation requested in checklist 1 or 2 (pages 10 or 13).
  - The DNR geologist has verified that the site is in alluvial soils. Check one of the following:
    - Not in 100-year floodplain or does not require a floodplain permit. Include correspondence from the DNR.
    - Requires floodplain permit. Include Floodplain Permit.

## ITEM 3 – OPERATION INFORMATION:

- A) A construction permit is required prior to any of the following:
1.  Constructing or modifying any unformed manure storage structure<sup>3</sup>, or constructing or modifying a confinement building that uses an unformed manure storage structure<sup>3</sup>.
  2.  Constructing, installing or modifying a confinement building or a formed manure storage structure<sup>2</sup> at a confinement feeding operation if, after construction, installation or expansion, the AUC of the operation is 1,000 animal units (AU) or more. This also applies to confinement feeding operations that store manure exclusively in a dry form.
  3.  Initiating a change that would result in an increase in the volume of manure or a modification in the manner in which manure is stored in any unformed manure storage structure<sup>3</sup>, even if no construction or physical alteration is necessary. Increases in the volume of manure due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
  4.  Initiating a change, even if no construction or physical alteration is necessary, that would result in an increase in the volume of manure or a modification in the manner in which manure is stored in a formed manure storage structure<sup>2</sup> if, after the change, the AUC of the operation is 1,000 AU or more. Increases in the volume of manure due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
  5.  Constructing or modifying any egg washwater storage structure or a confinement building at a confinement feeding operation that includes an egg washwater storage structure.
  6.  Initiating a change that would result in an increase in the volume of egg washwater or a modification in the manner in which egg washwater is stored, even if no construction or physical alteration is necessary. Increases in the volume of egg washwater due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
  7.  Repopulating a confinement feeding operation if it was closed for 24 months or more and if any of the following apply:
    1.  The confinement feeding operation uses an unformed manure storage structure<sup>3</sup> or egg washwater storage structure;
    2.  The confinement feeding operation includes only confinement buildings and formed manure storage structures<sup>2</sup> and has an AUC of 1,000 AU or more.
  8.  Installing a permanent manure transfer piping system, unless the department determines that a construction permit is not required.

<sup>3</sup> Unformed manure storage structure = covered or uncovered anaerobic lagoon, earthen manure storage basin, aerobic earthen structure.  
Revised 04/2011 cmz



B) In your own words, describe in detail, the proposed construction, expansion, installation, modification or repair being proposed in this project. Attach additional pages if necessary:

The proposed nursery building will be used for pigs between weaning and 50 lbs. It will be 59ft x 62ft and located at 6520 215<sup>th</sup> St. The nursery will have an 8 ft deep pit for manure storage and will allow space for 1000 head of pigs in two rooms of 500 head each. Each room will have 16 pens each holding 31 pigs. There will be no increase in production with this building. The building will relieve overcrowding and eventually phase old facilities.

C) **Master Matrix** (*must check one*). If any of boxes 1 to 3 are checked, the operation is required to be evaluated with the master matrix if the county, where the confinement feeding operation structure<sup>1</sup> is or would be located, has adopted a 'Construction Evaluation Resolution' (CER). Select the one that best describes your confinement feeding operation:

1.  A new confinement feeding operation proposed in a county that has adopted a CER.
2.  An existing operation constructed on or after April 1, 2002, in a county that has adopted a CER.
3.  An existing operation constructed prior to April 1, 2002, with a current or proposed AUC of 1,667 AU or more, in a county that has adopted a CER.
4.  None of the above. Therefore, the master matrix evaluation is not required.

D) **Qualified Operation** (*must check one*). If any of boxes 1 to 4 are checked, the operation is also a 'qualified operation'. A qualified operation is required to use a manure storage structure that employs bacterial action which is maintained by the utilization of air or oxygen, and which shall include aeration equipment. However, this requirement does not apply if box 5 is checked. Select the one that best describes your confinement feeding operation:

1.  A swine farrowing and gestating operation with an AUC of 2,500 AU or more.
2.  A swine farrow-to-finish operation with an AUC of 5,400 AU or more.
3.  A cattle confinement feeding operation (including dairies) with an AUC of 8,500 AU or more.
4.  Other confinement feeding operations with an AUC of 5,333 AU or more.
5.  This is not a qualified operation because:
  - a.  It is below the limits shown on boxes 1 to 4.
  - b.  It includes a confinement feeding operation structure<sup>1</sup> constructed prior to May 31, 1995.
  - c.  It handles manure exclusively on a dry form.

#### ITEM 4 – ANIMAL UNIT CAPACITY (AUC) and, if applicable, ANIMAL WEIGHT CAPACITY (AWC):

##### A) Calculating AUC – Required for all operations

For each animal species, multiply the maximum number of animals that you would ever confine at one time by the appropriate factor, then add all AU together on Table 1 (page 4). Use the maximum market weight for the appropriate animal species to select the AU factor.

You must complete all applicable columns in Table 1. Use column a) to calculate the existing AUC, before permit for existing operations only. Use column b) to calculate the 'Total proposed AUC' (after a permit is issued) including new operations. The number obtained in column b) is the AUC of the operation and must be used to determine permit requirements. Use column c) to calculate the 'New AU' to be added to an existing operation. To calculate the indemnity fee (see page 7), also use column c), however, if the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in the "New AU" (column c).

In calculating the AUC of a confinement feeding operation, you must include the AUC of all confinement buildings which are part of the confinement feeding operation, unless a confinement building has been abandoned. A confinement feeding operation structure<sup>1</sup> is abandoned if the confinement feeding operation structure<sup>1</sup> has been razed, removed from the site of a confinement feeding operation, filled in with earth, or converted to uses other than a confinement feeding operation structure<sup>1</sup> so that it cannot be used as a confinement feeding operation structure<sup>1</sup> without significant reconstruction. Therefore, in Table 1, enter the animal unit capacity of all the confinement buildings, including those that are from an "adjacent" operation located within 2,500 feet. For more information, contact the AFO Program at (515) 281-8941.

**Table 1. Animal Unit Capacity (AUC):** (No. HEAD) x (FACTOR) = AUC

Animal Species	a) Existing AUC (Before permit)			b) Total Proposed AUC (After permit)		
	(No. Head)	x (Factor)	= AUC	(No. Head)	x (Factor)	= AUC
Slaughter or feeder cattle		1.0			1.0	
Immature dairy cattle		1.0			1.0	
Mature dairy cattle		1.4			1.4	
Gestating sows		0.4			0.4	
Farrowing sows & litter		0.4			0.4	
Boars		0.4			0.4	
Gilts		0.4			0.4	
Finished (Market) hogs	2100	0.4	840	2100	0.4	840
Nursery pigs 15 lbs to 55 lbs	2800	0.1	280	2800	0.1	280
Sheep and lambs		0.1			0.1	
Horses		2.0			2.0	
Turkeys 7lbs or more		0.018			0.018	
Turkeys less than 7 lbs		0.0085			0.0085	
Broiler/Layer chickens 3 lbs or more		0.01			0.01	
Broiler/Layer chickens less than 3 lbs		0.0025			0.0025	

Note: If the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in the "New AU" (column c)

<b>TOTALS:</b>	<b>a) Existing AUC:</b>	1120	<b>b) Total proposed AUC:</b>	1120	<b>c) New AU = b) - a):</b>	0
----------------	-------------------------	------	-------------------------------	------	-----------------------------	---

(This is the AUC of the operation)

**B) Calculating AWC - Only for operations first constructed prior to March 1, 2003**

The AWC is needed for an operation that was first constructed prior to March 1, 2003, to determine some of the minimum separation distance requirements for construction or expansion.

The AWC is the product of multiplying the maximum number of animals that you would ever confine at any one time by their average weight (lbs) during the production cycle. Then add the AWC if more than one animal species is present (examples on how to determine the AWC are provided in 567 IAC 65.1(455B).)

If the operation was first constructed prior to March 1, 2003, you must complete all applicable columns in Table 2:

**Table 2. Animal Weight Capacity (AWC):** (No. head) \* (Avg. weight, lbs) = AWC, lbs

Animal Species	a) Existing AWC (Before Permit)			b) Proposed AWC (After permit)		
	(No. head) x avg weight	= AWC		(No. head) x avg weight	= AWC	
Slaughter or feeder cattle						
Immature dairy cattle						
Mature dairy cattle						
Gestating sows						
Farrowing sows & litter						
Boars						
Gilts						
Finished (Market) hogs	2100	150	315000	2100	150	315000
Nursery pigs 15 lbs to 55 lbs	2800	35	98000	2800	35	98000
Sheep and lambs						
Horses						
Turkeys 7lbs or more						
Turkeys less than 7 lbs						
Broiler/Layer chickens 3 lbs or more						
Broiler/Layer chickens less than 3 lbs						

c) New AWC = b) - a):

<b>TOTALS:</b>	<b>a) Existing AWC:</b>	413000	<b>b) Total proposed AWC:</b>	413000	<b>c) New AWC = b) - a):</b>	0
----------------	-------------------------	--------	-------------------------------	--------	------------------------------	---

(This is the AWC of the operation)

**ITEM 5 – SUBMITTAL REQUIREMENTS** Checklists No. 1 or 2 (pages 10-16) describe the submittal requirements, which are based on the type of confinement feeding operation structure<sup>1</sup> and AUC proposed. To determine which checklist to use, choose the option that best describes your confinement feeding operation:

- A)  **Formed manure storage structures<sup>2</sup>:** The proposed confinement feeding operation structure<sup>1</sup> will be or will use a formed manure storage structure<sup>2</sup>. Check one of the following boxes:
1.  A swine farrowing and gestating operation with an AUC of 1,250 AU or more. Use submittal checklist No. 2 (page 13.)
  2.  A swine farrow-to-finish operation with an AUC of 2,750 AU or more. Use submittal checklist No. 2 (page 13.)
  3.  A cattle confinement feeding operation (including dairies) with an AUC of 4,000 AU or more. Use submittal checklist No. 2 (page 13.)
  4.  Other confinement feeding operations with an AUC of 3,000 AU or more. Use submittal checklist No. 2 (page 13.)
  5.  None of the above. Use Submittal Checklist No. 1 (page 10.)

If any of boxes 1 to 4 are checked, the operation meets the threshold requirements for an engineer<sup>4</sup> and a Professional Engineer (PE), licensed in Iowa, is required. For these cases, use Submittal Checklist No. 2 (pages 13-15.)

If you checked box 5, your operation is below threshold requirements for an engineer<sup>4</sup> and a Professional Engineer (PE) is not required. Use Submittal Checklist No. 1 (pages 10-12).

- B)  **Unformed manure storage structure<sup>3</sup>:** The proposed confinement feeding operation structure<sup>1</sup>, will be or will use an unformed manure storage structure<sup>3</sup> or an egg washwater storage structure. A Professional Engineer (PE) licensed in Iowa must design and sign the engineering documents for any size of operation. Use Submittal Checklist No. 2 (pages 13-15) and Addendum "A" (page 16).

**ITEM 6 – SIGNATURE:**

I hereby certify that the information contained in this application is complete and accurate.

Signature of Owner(s): Paustean Enterprises Ltd. Date: 6-13-12  
By Kent Paustean Pres

**MAILING INSTRUCTIONS:**

To expedite the application process, follow the submittal requirements explained in Checklist No. 1 or 2 (pages 10 to 16), whichever applies. Page 1 of this form should be the first page of the package. Mail all documents and fees to:

**Iowa DNR  
AFO Program  
502 East 9<sup>th</sup> St.  
Des Moines, IA 50319-0034**

*(Note: Incomplete applications will be returned to the sender. Application documents submitted to the Field Office will delay the application process).*

**Questions**

Questions about construction permit requirements or regarding this form should be directed to an engineer of the animal feeding operations (AFO) Program at (515) 281-8941 or go to <http://www.iowadnr.gov> (select the link to "Animal Feeding Operations"). To contact the appropriate DNR Field Office, go to <http://www.iowadnr.gov/fo/index.html>.

<sup>4</sup> Threshold requirements for an engineer apply to the construction of a formed manure storage structure<sup>2</sup>. Operations that meet or exceed the threshold requirements for an engineer, are required to submit engineering documents signed by a professional engineer licensed in the state of Iowa. Please refer to Checklist No. 2 (pages 13 to 15.)  
Revised 04/2011 cmz 5 DNR Form 542-1428

ITEM 7

**Interested Parties Form  
Confinement Feeding Operation**

**Interest** means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly or indirectly through a spouse or dependent child, or both.

**INSTRUCTIONS:**

Please list all persons (including corporations, partnerships, etc.) who have an interest in any part of the confinement feeding operation covered by this permit application.

Full Name	Address	City/State	Zip
Mike Paustian	22225 70 <sup>th</sup> Ave.	Walcott/IA	52773
Amy Paustian	22225 70 <sup>th</sup> Ave.	Walcott/IA	52773
Kent Paustian	6520 215 <sup>th</sup> St.	Walcott/IA	52773
Marcia Paustian	6520 215 <sup>th</sup> St.	Walcott/IA	52773
Ross Paustian	389 W. Parkview Dr.	Walcott/IA	52773
Carol Paustian	389 W. Parkview Dr.	Walcott/IA	52773
Carolyn Paustian	P.O. Box 459	Walcott/IA	52773

For each name above, please list below all other confinement feeding operations in Iowa in which that person has an interest. Check box "None", below, if there are no other confinement feeding operations in Iowa in which the above listed person has an interest.

Operation Name	Location (1/4 1/4, 1/4, Section, Tier, Range, Township, County)	City
<input type="checkbox"/> None [There are no other confinements in Iowa in which the above listed person(s) has or have an interest].		
Sow Unit/Ross	SE SE 19 & SE SW 20 79N 2E Hickory Grove, Scott	Walcott
Stender Farm	NW NE 20 79N 2E Hickory Grove, Scott	Walcott

I hereby certify that the information provided on this form is complete and accurate.

Signature of Owner(s): Paustian Enterprises Blvd. Date: 6-13-12  
By, Kent Paustian Pres

**Manure Storage Indemnity Fee Form  
for Construction Permits**

<b>CASHIER'S USE ONLY</b>
0474-542-474A-0431
Facility ID #
County

Credit fees to: Paustian Enterprises, Ltd.

Name of operation: Home Farm

**INSTRUCTIONS:**

- 1) Use the 'Total Proposed AUC' from column b), Table 1 (page 4), to select the appropriate fee line in the table below. The 'Total Proposed AUC' is the AUC of the operation.
- 2) Select the animal specie and row number (see examples). Enter the 'New AU' from column c), Table 1 (page 4). The 'New AU' is the number of AU to be added to an existing operation or being proposed with a new operation. **Note:** if the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in "New AU" (column c).
- 3) Multiply the 'New AU' by the appropriate 'Fee per AU'. The resulting number is the indemnity fee due.
  - **Example 1:** An existing swine operation is expanding from an 'Existing AUC' of 1,000 AU to a 'Total Proposed AUC' of 1,800 AU, and has previously paid an indemnity fee for the existing 1,000 AU. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is between 1,000 AU and 3,000 AU; the animal specie is other than poultry; enter 800 AU in the 'New AU' column, row 4, and multiply it by \$ 0.15:  

$$(800 \text{ AU}) \times (\$ 0.15 \text{ per AU}) = \$ 120.00$$
  - **Example 2:** An existing poultry operation is expanding from an 'Existing AUC' of 250 AU to a 'Total Proposed AUC' of 2,000 AU and has not paid the indemnity fee for animals housed in the existing buildings. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is between 1,000 AU and 3,000 AU; the animal specie is poultry and the indemnity fee has not previously been paid, enter 2,000 AU in the 'New AU' column on row 3, and multiply it by \$0.06:  

$$(2,000 \text{ AU}) \times (\$ 0.06 \text{ per AU}) = \$ 120.00$$
  - **Example 3:** If you are proposing a new swine confinement feeding operation with a 'Total Proposed AUC' of 3,500 AU, enter 3,500 AU in the 'New AU' column, row 6 and multiply it by \$ 0.20:  

$$(3,500 \text{ AU}) \times (\$ 0.20 \text{ per AU}) = \$ 700.00$$
  - **Example 4:** If you are applying for a construction permit but you are not increasing the AUC of the operation, and has previously paid the applicable indemnity for the animals housed in the existing buildings, there is no indemnity fee due (\$ 0.00). If no indemnity fee is due, do not submit this page.

**Indemnity Fee Table:**

Total Proposed AUC - (After permit) from column b), Table 1	Row	Animal species	New AU - from column c), Table 1	x	Fee per AU	Indemnity Fee
Less than 1,000 AU	1	Poultry		x	\$ 0.04 =	
	2	Other		x	\$ 0.10 =	
1,000 AU or more to less than 3,000 AU	3	Poultry		x	\$ 0.06 =	
	4	Other	1120	x	\$ 0.15 =	168.00
3,000 AU or more	5	Poultry		x	\$ 0.08 =	
	6	Other		x	\$ 0.20 =	

ITEM 8 (Cont.)

Filing Fees Form  
for Construction Permits

CASHIER'S USE ONLY  
0473-542-473A-0431  
0474-542-474A-0431  
Facility ID #  
County

Credit fees to: Paustian Enterprises, Ltd.

Name of operation: Home Farm

**INSTRUCTIONS:**

1. If the operation is applying for a construction permit enclose a payment for the following:
  - Construction application fee \$ 250.00.  
(Note: This fee is non-refundable)
  
2. A manure management plan must be submitted and you must also pay the following:
  - Manure management plan filing fee \$ 250.00  
(Note: This fee is non-refundable)
  
3. Total filing fees: Add the fees paid in items 1 and 2 (above): \$ 500.00

<b>SUMMARY:</b>	
- Manure Storage Indemnity Fee (see previous page) to be deposited in the Manure Storage Indemnity Fee Fund (474)	\$ <u>168.00</u>
- Total filing fees (see item 3 on this page) to be deposited in the Animal Agriculture Compliance Fund (473)	\$ <u>500.00</u>
<b>TOTAL DUE:</b>	<b>\$ <u>668.00</u></b>

4. Make check payable to: Iowa Department of Natural Resources or Iowa DNR; and send it along with the construction application documents (See submittal checklist No. 1 or 2, pages 10-15.) Note: Do not send this fee to the county.

ITEM 9

**COUNTY VERIFICATION RECEIPT  
OF DNR CONSTRUCTION PERMIT APPLICATION**

This form provides proof that the County Board of Supervisors has been provided with a complete copy of the construction permit application documents (everything except the fees) for the confinement feeding operation:

Owner: Paustian Enterprises, Ltd. Telephone: 563-284-6814

Name of operation: Home Farm

Location: SW NE 30 79N & 2E Hickory Grove Scott  
(1/4 1/4) (1/4) (Section) (Tier & Range) (Name of Township) (County)

Documents being submitted to the county:

- Construction permit application form: submit items 1 to 9 (see Submittal Checklist No. 1 or 2)
- Attachment 1 - Aerial photos: Must clearly show the location of the proposed confinement feeding operation structure<sup>1</sup> and that all the separation distances are met, including those claimed for points in the master matrix (if applicable).
- Attachment 2 - Statement of design certification, submit any of the following (see Checklist No. 1 or 2):
  - Construction Design Statement form
  - Professional Engineer (PE) Design Certification form
  - Engineering report, construction plans and technical specifications
  - In addition, if proposing an unformed manure storage structure<sup>3</sup> or an egg washwater storage structure submit documentation required in Addendum "A" of this construction application form.
- Attachment 3 - Manure management plan.
- Attachment 4 - Master Matrix (if required). You must include supporting documents (see Checklist No. 1 or 2)

**THIS SECTION IS RESERVED FOR THE COUNTY**

As soon as DNR receives a construction permit application, the DNR will fax your County Auditor a "Courtesy reminder letter" explaining what actions your County Board of Supervisors must complete and the deadlines.

Public Notice is required for **all** construction permit applications, including those applications not required to be evaluated with the master matrix and applications in counties not participating in the Master matrix.

Counties participating in the master matrix: the county's master matrix evaluation and county's recommendation is required for the following cases:

- A new confinement feeding operation that is applying for a construction permit
- An existing confinement feeding operation that was first constructed on or after April 1, 2002 that is applying for a construction permit.
- An existing confinement feeding operation that was first constructed prior to April 1, 2002 that is applying for a construction permit with an animal unit capacity (AUC) is 1,667 animal units (AU) or more.

I have read and acknowledge the county's duty with this construction permit application, as specified in 567 IAC 65.10(455B) and Iowa Code 459.304. On behalf of the Board of Supervisors for:

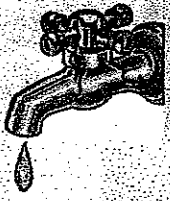
COUNTY: Scott

NAME: Sherry Kulis

TITLE: Planning Specialist  
(Member of the County Board of Supervisors or its designated official/employee)

Date: 6-18, 2012

If you do not receive the courtesy reminder letter within a reasonable time, or if you have any questions, please contact the animal feeding operations (AFO) Program at (515) 281-8941 or visit [www.IowaDNR.gov](http://www.IowaDNR.gov)



**WHEN IT COMES TO WATER, Don't Be A Drip!**  
 It may seem like a drop in the bucket, but you really can make a difference when it comes to conserving our most precious natural resource.

Home Farm

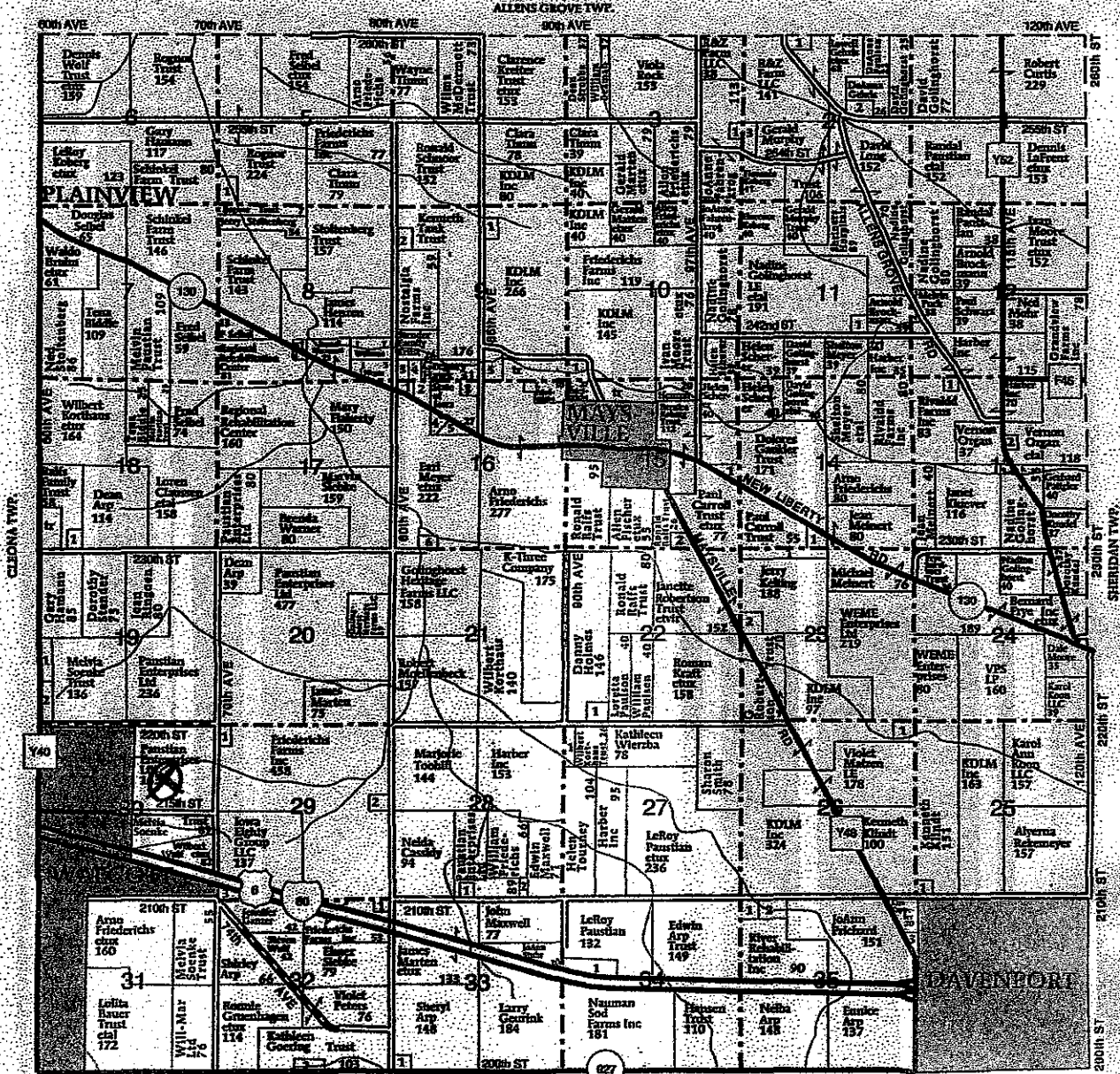
(X) Site location

T-79-N

HICKORY GROVE PLAT



R-2-E



**HICKORY GROVE TOWNSHIP**

- SECTION 2**  
 1. Wirth, Jim 12  
 2. Grandview Farms Inc 13  
 3. Schoenthaler, Jeremy 10
- SECTION 3**  
 1. Gevers, Andrew 6
- SECTION 4**  
 1. Schinkel Farm Trust 16
- SECTION 8**  
 1. Schneider, Anthony 6

- SECTION 9**  
 1. Newmarch Trust, Paul 5  
 2. Kradko, Edward 5  
 3. Kieffer, Sharon 5  
 4. Wolf, Robert 6  
 5. Frederichs, Arno 15
- SECTION 10**  
 1. Jemell, Donna 15
- SECTION 11**  
 1. Holtz, Donald 6
- SECTION 12**  
 1. Grandview Farms Inc 10
- SECTION 18**  
 1. Adrian, Gary 6

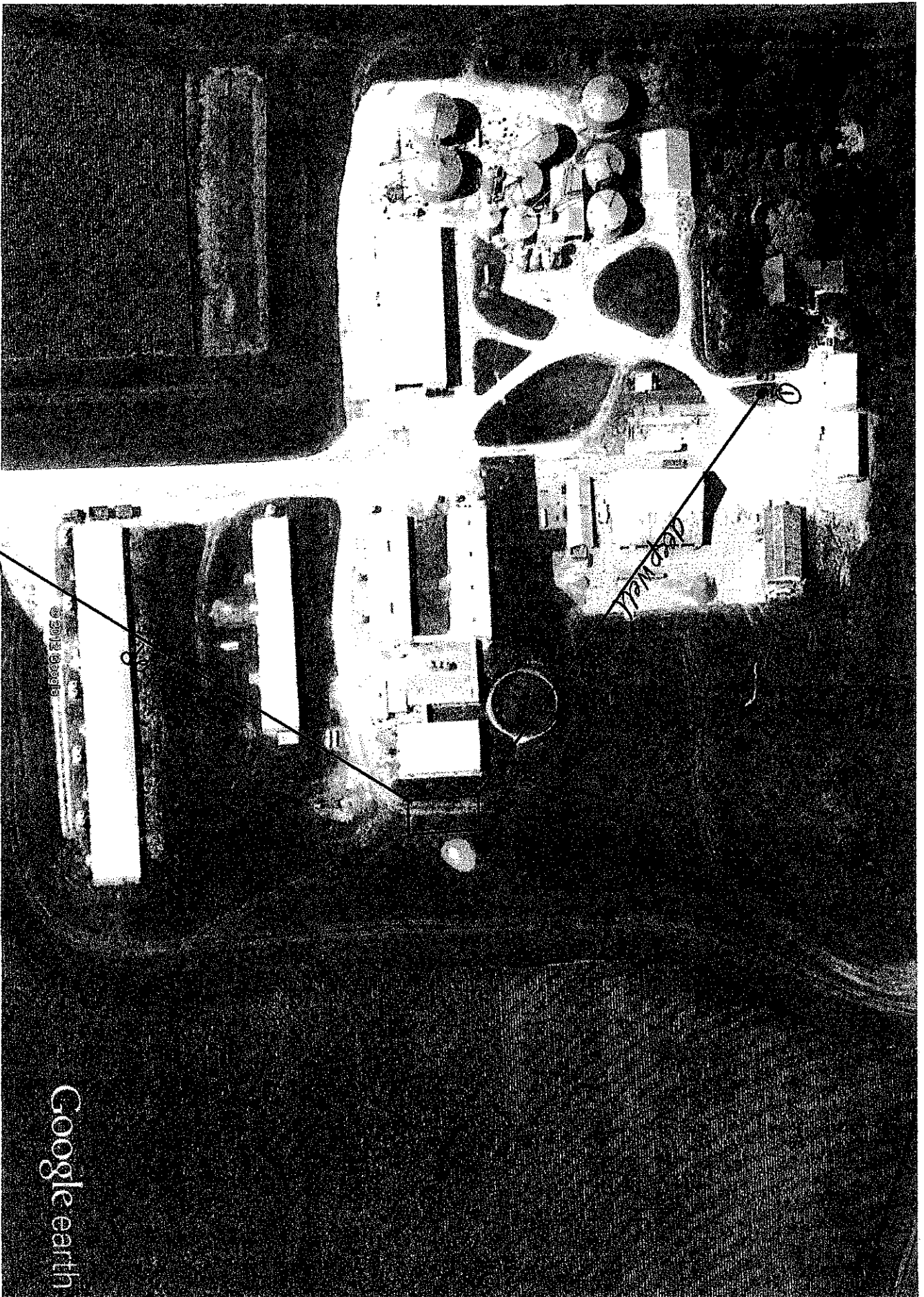
- SECTION 14**  
 1. Brosis LLC 10
- SECTION 15**  
 1. Sapp, Wayne 11
- SECTION 16**  
 2. Frederichs, Loran 14
- SECTION 17**  
 1. Ehrcke, Kenneth 6  
 2. Schneekloth, Jeffrey 9  
 3. Robinson, Thomas 6  
 4. R&D Loss Trust 6  
 5. Meyer, Paul 7
- SECTION 18**  
 1. Gollinghorst, Robert 5
- SECTION 19**  
 1. Miller, John 9

- SECTION 19**  
 1. Duncan, Arthur 11  
 2. August, Gary 9
- SECTION 22**  
 1. Paulsen, William 9
- SECTION 23**  
 1. Carroll Trust, Paul 15  
 2. Robertson Trust, Janette 7
- SECTION 25**  
 1. Congdon, Dennis 11
- SECTION 26**  
 1. WEME Enterprises Ltd 12

- SECTION 27**  
 1. Harbor Inc 13
- SECTION 28**  
 1. Duffey Trust, Meck 9  
 2. Bergard, Edward 5
- SECTION 29**  
 1. Frederichs, Earl 7  
 2. Frederichs, Earl 7  
 3. Iowa Eighty Group LLC 6
- SECTION 32**  
 1. Kraft, Scott 5  
 2. Allison, Grant 10

- SECTION 33**  
 1. Knickrehm, John 7
- SECTION 34**  
 1. Stutz, JoAnn 12
- SECTION 35**  
 1. Robeman, Lysle 8  
 2. DeVault, Roy 10  
 3. Harris, Allen 9





Google earth

feet  
meters



Google earth

Search

Map Unit Legend

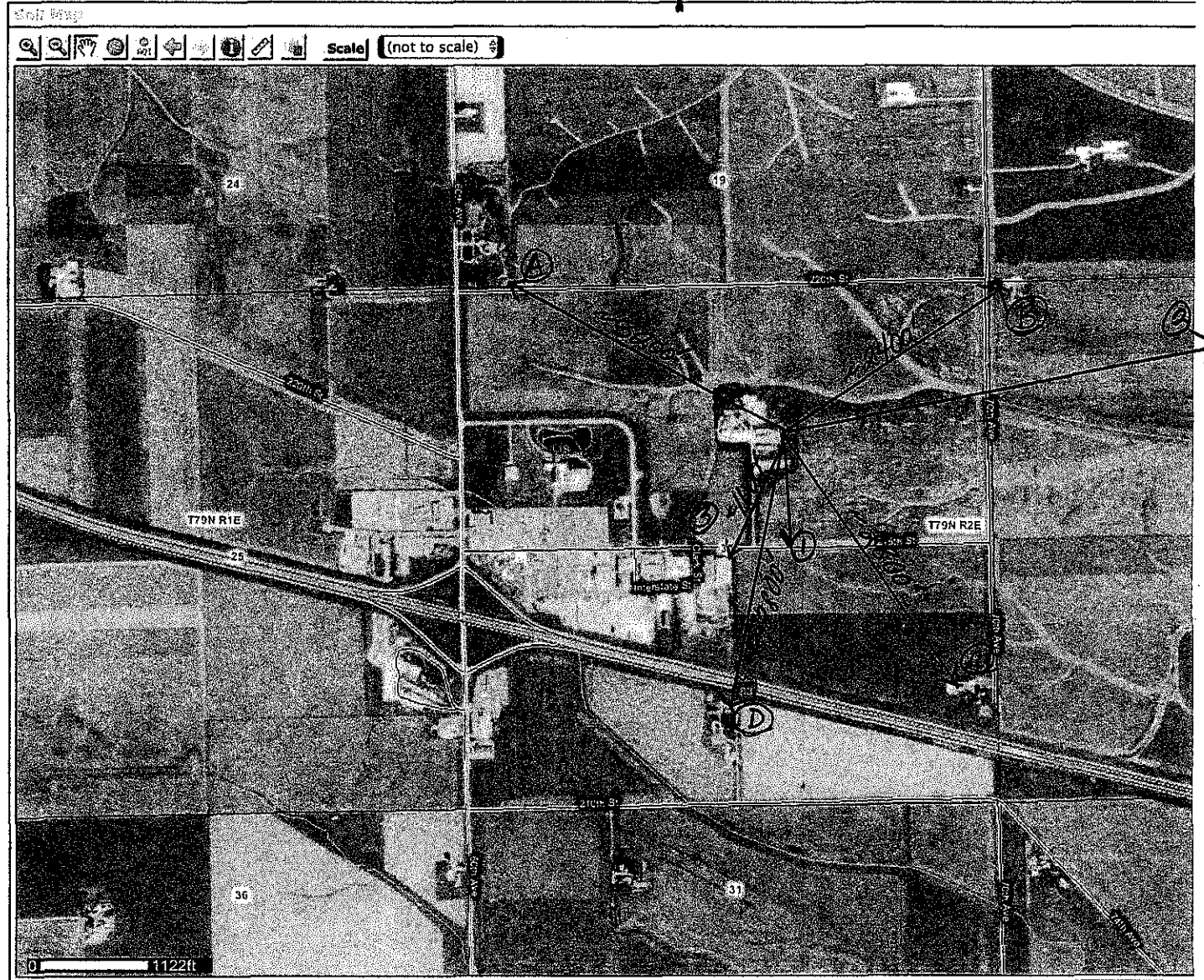
Scott County, Iowa (IA163)			
Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
119	Muscataine silty clay loam, 0 to 2 percent slopes	1.8	42.6%
9208	Tama silty clay loam, sandy substratum, 2 to 5 percent slopes	2.4	57.4%
<b>Totals for Area of Interest</b>		<b>4.2</b>	<b>100.0%</b>

(A-D) closest neighbors

- ① ~ 1100' ft From right of way
- ② ~ 1 1/2 miles to nearest creek to the east

There are no major water sources or designated wetlands within a mile of this farm.

③ Nearest business



**TABLE 6-C (Swine, Sheep, Horses and Poultry)**

**Minimum separation distances for expansion of a confinement feeding operation constructed prior to January 1, 1999**

Type of Structure (liquid, semi-liquid and dry manure storage)	Size of operation AUC (AU) and AWC (lbs)	Residences, Businesses, Churches, Schools		Public use areas
		Unincorporated Areas	Incorporated Areas	
Anaerobic lagoons and uncovered earthen manure storage basins	500 AU or less	1,250 feet	1,250 feet	1,250 feet
	501 AU to <625,000 lbs	1,250 feet	1,250 feet	1,250 feet
	625,000 lbs to <1,250,000 lbs	1,875 feet	1,875 feet	1,875 feet
	1,250,000 lbs or more	2,500 feet	2,500 feet	2,500 feet
Covered earthen manure storage basins	500 AU or less	750 feet	1,250 feet	1,250 feet
	501 AU to <625,000 lbs	750 feet	1,250 feet	1,250 feet
	625,000 lbs to <1,250,000 lbs	1,000 feet	1,875 feet	1,875 feet
	1,250,000 lbs or more	1,500 feet	2,500 feet	2,500 feet
Uncovered formed manure storage structures	500 AU or less	None	None	None
	501 AU to <625,000 lbs	1,000 feet	1,250 feet	1,250 feet
	625,000 lbs to <1,250,000 lbs	1,500 feet	1,875 feet	1,875 feet
	1,250,000 lbs or more	2,000 feet	2,500 feet	2,500 feet
Confinement buildings and covered formed manure storage structures	500 AU or less	None	None	None
	501 AU to <625,000 lbs	750 feet	1,250 feet	1,250 feet
	625,000 lbs to <1,250,000 lbs	1,000 feet	1,875 feet	1,875 feet
	1,250,000 lbs or more	1,500 feet	2,500 feet	2,500 feet
Egg washwater storage structures	500 AU or less	None	None	None
	501 AU to <625,000 lbs	750 feet	1,250 feet	1,250 feet
	625,000 lbs to <1,250,000 lbs	1,000 feet	1,875 feet	1,875 feet
	1,250,000 lbs or more	1,500 feet	2,500 feet	2,500 feet

**Distances to Wells**

Applies to all Animal Feeding Operations, regardless of the size of operation, including operations with 500 AU or less	Public well		Private well	
	Shallow	Deep	Shallow	Deep
Aerobic structure, anaerobic lagoon, earthen manure storage basin, egg washwater storage structure and open feedlot runoff control basin.	1,000 feet	400 feet	400 feet	400 feet
Formed manure storage structure, confinement building, open feedlot solids settling basin and open feedlot.	200 feet	100 feet	200 feet	100 feet

**Other Distances**

Applies to all Confinement Feeding Operations, regardless of animal unit capacity, including operations with 500 AU or less, unless stated otherwise	
Major water sources, wellhead, cistern of an agricultural drainage well or known sinkhole (Excluding farm ponds, privately owned lakes or when a secondary containment barrier is provided)	1,000 feet
Water sources other than major water sources, surface intakes of an agricultural drainage well (Excluding farm ponds, privately owned lakes or when a secondary containment barrier is provided)	500 feet
Designated wetlands (owned and managed by the Federal government or the Iowa DNR)	2,500 feet
Right-of-way of a public thoroughfare (road, street or bridge) constructed or maintained by the state or a political subdivision (excluding operations with 500 AU or less)	100 feet



Iowa DNR Interactive Mapping



Iowa Department of Natural Resources - go to <http://www.iowadnr.gov> and click on Mapping in left menu

Karst + Alluvial Soils map

Paustian Enterprises  
Home Farm



# Construction Design Statement (CDS)

## Instructions:

1. This form is for new or expanding confinement feeding operations with an AUC<sup>1</sup> of more than 500 AU, not required to have a professional engineer (PE)<sup>2</sup>, that are proposing to construct a formed manure storage structure<sup>3</sup>.
2. Complete and submit Sections 1, 2 and 3 (pages 1 to 5).
3. Complete and submit Section 4 (page 6) only if you are applying for a construction permit and are constructing three or more confinement feeding operation structures<sup>4</sup>.
4. Mail only pages 1 to 5, and page 6 (if applicable) as instructed on page 6. Do not mail the remainder of this form.
5. If the site-specific design is sealed by a PE<sup>2</sup>, do not use this CDS instead use DNR Form 542-8122.

## Section 1 - Information about the proposed formed manure storage structure<sup>3</sup>(s)

### A) Information about the operation:

Name of operation: Paustian Enterprises Facility ID No. : \_\_\_\_\_  
 Location: SW NE 30 79 & 2 Hickory Grove Scott  
(X 4) (X) (Section) (Tier & Range) (Name of Township) (County)

### B) Description of the proposed formed manure storage structure<sup>3</sup>. Include dimensions (length, width, or diameter, depth). Indicate if it is aboveground or belowground; covered or uncovered, made of concrete or steel. If necessary attach more pages:

59' x 62' x 8'0" belowground concrete pit covered by a swine nursery

### C) Karst Determination: Go to <http://www.iowadnr.gov>, select the link to 'Environment' then click on 'Mapping and GIS'. then click on AFO Siting Atlas. Click on the red push pin icon to enter a legal description of the proposed location. Make sure the karst box is checked in the left legend. If you cannot access the map, or if you have questions about this issue, contact the AFO Engineer at 712-262-4177. Check one of the following:

- The site is not in karst or potential karst. Print and enclose the map with the name and location of the site clearly marked.
- The Siting Atlas has indicated that the site is in karst. The upgraded concrete standards of 567 IAC 65.15(14)"c" must be used. Complete and sign Section 3,H (page 5).

### D) Alluvial Soils Determination: Go to <http://www.iowadnr.gov>, select the link to 'Environment' then click on 'Mapping and GIS' then click on AFO Siting Atlas. Click on the red push pin icon to enter a legal description of the proposed location. Make sure the alluvial box is checked in the left legend. If you cannot access the map, or if you have questions about this issue, contact DNR Flood Plain at 1-866-849-0321. Check one of the following:

- The site is not in alluvial soils. Print and enclose the map with the name and location of the site clearly marked.
- If the site is in alluvial soils contact DNR Flood Plain at 866-849-0321. You will be required to submit a petition for a declaratory order if less than 1000 AU or request a flood plain determination if 1000 AU or greater. After receiving Flood Plain determination, submit one of the following:
  - Include correspondence from the DNR showing the site is not in 100-year flood plain or does not require a Flood Plain permit.
  - Include copy of the Flood Plain permit if a Flood Plain permit is required.

## Section 2 - Manure management plan:

An original manure management plan (MMP) is enclosed with this form, even if a MMP was previously filed.

Paustian Enterprises Ltd. Paustian Enterprises Ltd. 6-18-12  
Owner's Name (print) Owner's Signature Date

<sup>1</sup> To determine the AUC see the 'Manure Storage Indemnity Fee' (Form 542-4021) or the 'Construction Permit Application' (Form 542-1428), or visit <http://www.iowadnr.gov>

<sup>2</sup> PE is a professional engineer licensed in the state of Iowa or a NRCS-Engineer working for the USDA-Natural Resources Conservation Service (NRCS).

<sup>3</sup> Formed manure storage structure means a covered or uncovered concrete or steel tank, including concrete pits below the floor.

<sup>4</sup> Confinement feeding operation structure = A confinement building, a formed or unformed manure storage structure, or an egg washwater storage structure.

**Section 3 - Construction design standards:** The person responsible for constructing the formed manure storage structure(s)<sup>3</sup> must complete pages 2 to 5.

A) **Liquid and semi-liquid manure:** The proposed formed manure storage structure<sup>3</sup> will be (check one):

- A.1  A non-circular concrete tank, belowground, with walls laterally braced or below the building concrete pit designed according to 567 IAC Chapter 65, Appendix D.
- A.2  A non-circular concrete tank, belowground, walls designed according to MidWest Plan Service (MWPS), publication MWPS-36. Include design calculations.
- A.3  A circular concrete tank, walls designed according to MidWest Plan Service (MWPS), publication MWPS TR-9. Include design calculations.
- A.4  Will be made of steel, constructed aboveground according to the manufacturer's recommendations.

B) **Dry manure:** The proposed formed manure storage structure<sup>3</sup> will be (check one):

- B.1  An aboveground concrete tank, with walls designed according to MWPS-36. Include design calculations.
- B.2  Will be made of steel, constructed aboveground according to the manufacturer's recommendations.
- B.3  Will be a belowground or partially belowground concrete tank, with walls laterally braced designed according to 567 IAC Chapter 65, Appendix D or MWPS-36. Include design calculations.

C) **Details of the proposed design:** Submit an additional completed copy of this page 2 for each formed manure storage structure<sup>3</sup> that have different dimensions. Complete all of the following information:

Number of buildings: 1 Building name: Nursery

Dimensions of proposed formed manure storage structure<sup>3</sup>

	Length	Width	Height or depth	Wall thickness	Diameter (circular tanks only)
Feet	62	59	8	0	
Inches	0	0	0	8	

To determine the appropriate vertical steel in walls, first check one of the following boxes (must check one):

- a. To use Tables D-1 and D-2 (on pages 7-8), backfilling of walls shall be performed with gravel, sand, silt, and clay mixtures (less than 50 percent fines), with coarse sand with silt or clay (less than 50 percent fines), or cleaner granular material (see page 9 for the unified soils classification). You will need to submit a copy of a USDA soil survey map with the proposed location of the formed manure storage structures<sup>3</sup> clearly marked showing the unified soil classification; or a statement signed by a qualified organization or NRCS staff.
- b. Use Tables D-3 and D-4 (on pages 8-9) if backfilling of walls will be performed with soils that are unknown or with low plasticity silts and clays with some sand or gravel (50 percent or more fines); or fine sands with silt or clay (less than 50 percent fines); or low to medium plasticity silts and clays with little sand or gravel (50 percent or more fines); or high plasticity silts and clays (see page 9 for unified soils classification). You must use Tables D-3 and D-4 if you do not submit the soils information requested in box "a", above.

Maximum spacing of steel, in inches

Description of reinforcing steel in walls	Proposed vertical steel in walls [see boxes "a" and "b", above]				Proposed horizontal steel in walls (use Table D-5)
	Walls where vehicles are <u>not</u> allowed within 5 feet (use Table D-1) <sup>a</sup>	All walls with pumpout ports and walls where vehicles are allowed within 5 feet (use Table D-2) <sup>a</sup>	Walls where vehicles are <u>not</u> allowed within 5 feet (use Table D-3) <sup>b</sup>	All walls with pumpout ports and walls where vehicles are allowed within 5 feet (use Table D-4) <sup>b</sup>	
Grade 40, No. 4					12
Grade 40, No. 5					
Grade 60, No. 4				9	
Grade 60, No. 5					

D) **Aboveground tanks or partially aboveground tanks:** Liquid and semi-liquid manure (check the following box):

- If the proposed tank is to be constructed aboveground or partially aboveground and will have an external outlet or inlet below the liquid level, the tank will also be constructed according to the 567 IAC 65.15(20).

E) **Steel Tanks:** Certification that the tank will be constructed according to the tank manufacturer's specifications:

Name of tank manufacturer company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

**Additional construction design standards:**

F) To determine the additional requirements set forth in 567 IAC 65.15(14) that would apply to the proposed formed manure storage structure<sup>3</sup>, check any of the following 3 boxes based on the information entered on Sections 3.A or 3.B (page 2):

- If you checked boxes A.1, A.2, A.3 or B.3 (on page 2) all of the following 15 additional requirements apply. Complete the numbered items 1 to 15 (below).
- If you checked box B.1 (on page 2), only the requirements of numbered items 1, 3, 4, 5, 6, 8 and 12 apply and need to check those boxes (below).
- If you checked boxes A.4 or B.2 (on page 2) and the steel tank will have a concrete floor, only the requirements of numbered items 1, 2, 3, 4, 5, 8, 9, 12, apply and need to check those boxes (below).

**Additional Requirements that will be followed during construction of the formed manure storage structure(s)<sup>3</sup>:**

1. **Site preparation (check the following box):**
  - The finished subgrade of a formed manure storage structure shall be graded and compacted to provide a uniform and level base and shall be free of vegetation, manure and debris. For the purpose of this subrule, "uniform" means a finished subgrade with similar soils.
2. **Groundwater separation requirements (check one of the following boxes):**
  - When the groundwater table, as determined in 65.15(7)"c," is above the bottom of the formed structure, a drain tile shall be installed along the footings to artificially lower the groundwater table pursuant to 65.15(7)"b"(2). The drain tile shall be placed within 3 feet of the footings as indicated in Appendix D, Figure D-1, at the end of this chapter and shall be covered with a minimum of 2 inches of gravel, granular material, fabric or a combination of these materials to prevent plugging the drain tile. A device to allow monitoring of the water in the drainage tile lines installed to lower the groundwater table and a device to allow shutoff of the drainage tile lines shall be installed if the drainage tile lines do not have a surface outlet accessible on the property where the formed manure storage structure is located.
  - In lieu of the drain tile, a certification signed by a PE<sup>2</sup>, a groundwater professional certified pursuant to 567 Chapter 134, or a qualified staff from NRCS, is being submitted indicating that the groundwater elevation, according to 65.15(7)"c", is below the bottom of the formed structure.
3. **Minimum as-placed concrete compressive strength (check the following box):**
  - All concrete shall have the following minimum as-placed compressive strengths and shall meet American Society for Testing and Materials (ASTM) standard ASTM C 94: 4,000 pounds per square inch (psi) for walls, floors, beams, columns and pumpouts and 3,000 psi for the footings. The average concrete strength by testing shall not be below design strength. No single test result shall be more than 500 psi less than the minimum compressive strength.
4. **Cement and aggregates specifications (check the following box):**
  - Cementitious materials shall consist of Portland cement conforming to ASTM C 150. Aggregates shall conform to ASTM C 33. Blended cements in conformance with ASTM C 595 are allowed only for concrete placed between March 15 and October 15. Portland-pozzolan cement or Portland blast furnace slag blended cements shall contain at least 75 percent, by mass, of Portland cement.
5. **Concrete consolidation and vibration requirements (check the following box):**
  - All concrete placed for walls shall be consolidated or vibrated, by manual or mechanical means, or a combination, in a manner which meets ACI 309.
6. **Minimum rebar specifications: (check the following box):**
  - All rebar used shall be a minimum of grade 40 steel. All rebar, with the exception of rebar dowels connecting the walls to the floor or footings, shall be secured and tied in place prior to the placing of concrete.
7. **Wall reinforcement placement specifications (check the following box):**

- All wall reinforcement shall be placed so as to have a rebar cover of 2 inches from the inside face of the wall for a belowground manure storage structure. Vertical wall reinforcement should be placed closest to the inside face. Rebar placement shall not exceed tolerances specified in ACI 318.
8. Minimum floor specifications. Complete part a) and b):
- a) Floor thickness requirements (check the following box):
- The floor slab shall be a minimum of 5 inches thick. Nondestructive methods to verify the floor slab thickness may be required by the department. The results shall indicate that at least 95 percent of the floor slab area meets the minimum required thickness. In no case shall the floor slab thickness be less than 4½ inches.
- b) The floor slab reinforcement shall be located in the middle of the thickness of the floor slab (check one of the following boxes):
- Formed manure storage structures with a depth of 4 feet or more shall have primary reinforcement consisting of a minimum of #4 rebar placed a maximum of 18 inches on center in each direction placed in a single mat.
- Formed manure storage structure with a depth less than 4 feet shall have shrinkage reinforcement consisting of a minimum of 6 × 6-W1.4 × W1.4 welded wire fabric.
9. Minimum footing specifications (check the following box):
- The footing or the area where the floor comes in contact with the walls and columns shall have a thickness equal to the wall thickness, but in no case be less than 8 inches, and the width shall be at least twice the thickness of the footing. All exterior walls shall have footings below the frostline. Tolerances shall not exceed -¼ inch of the minimum footing dimensions.
10. Requirement to connect walls to footings (check one of the following boxes):
- The vertical steel of all walls shall be extended into the footing, and be bent at 90°, OR
- A separate dowel shall be installed as a #4 rebar that is bent at 90° with at least 20 inches of rebar in the wall and extended into the footing within 3 inches of the bottom of the footing and extended at least 3 inches horizontally, as indicated in Appendix D, Figure D-1 (page 10). Dowel spacing (bend or extended) shall be the same as the spacing for the vertical rebar.
- As an alternative to the 90° bend, the dowel may be extended at least 12 inches into the footing, with a minimum concrete cover of 3 inches at the bottom, as indicated in Appendix D, Figure D-1 (page 10). Dowel spacing (bend or extended) shall be the same as the spacing for the vertical rebar.
- In lieu of dowels, mechanical means or alternate methods may be used as anchorage of interior walls to footings. Please submit structural calculations and details of this proposal.
11. Concrete forms specifications (check the following box):
- All walls shall be formed with rigid forming systems and shall not be earth-formed.
12. Curing of concrete requirements (check the following box):
- All concrete shall be cured for at least seven days after placing, in a manner which meets ACI 308, by maintaining adequate moisture or preventing evaporation. Proper curing shall be done by ponding, spraying or fogging water; or by using a curing compound that meets ASTM C 309; or by using wet burlap, plastic sheets or similar materials.
13. Construction joints and waterstops specifications (check the following box):
- All construction joints in exterior walls shall be constructed to prevent discontinuity of steel and have properly spliced rebar placed through the joint. Waterstops shall be installed in all areas where fresh concrete will meet hardened concrete as indicated in Appendix D, Figures D-1 and D-2, at the end of this chapter. The waterstops shall be made of plastic, rolled bentonite or similar materials approved by the department.
14. Backfilling of walls specifications (check the following box):
- Backfilling of the walls shall not start until the floor slats or permanent bracing have been installed. Backfilling shall be performed with material free of vegetation, large rocks or debris.
15. Additional design requirements (check the following box, if applicable):
- A formed manure storage structure with a depth greater than 12 feet shall be designed by a PE or an NRCS engineer.



G) **Construction Certification:** The person responsible for constructing the formed manure storage structure<sup>3</sup> must sign this page. Any change(s) to the specifications of the formed manure storage structure must be first approved by DNR:

"I hereby certify that I have read and understand the minimum design and construction standards of Iowa Code chapter 459, Subchapter III, and the 567 Iowa Administrative Code (IAC) 65.15(14) "Minimum concrete standards" or 567 IAC 65 (if other than concrete). The proposed formed manure storage structure(s)<sup>3</sup> at the operation:

Name of operation: Paustian Enterprises County: Scott

Owner's name: Kent Paustian

will be constructed in accordance with these minimum requirements. Included with this certification are:

- Page 2, for each formed manure storage structure<sup>3</sup> that have different dimensions
- Pages 3 to 5 (applicable sections)
- Other documents (specify): \_\_\_\_\_

Nicole Harmsen  
(Print name)

  
(Signature)

6-5-12  
(Date)

P.S.I.  
(Company)

1204 1<sup>st</sup> Ave NE, Wellman, IA 52356  
(Address)

(319) 646-2430  
(Phone No.)

(See page 6 for mailing instructions)



# Manure Management Plan Form

## Animal Feeding Operation Information

**Instructions:** Complete this form for your animal feeding operation. Footnotes are provided on page 4.

The information within this form, and the attachments, describes my animal feeding operation, my manure storage and handling system, and my planned manure management system. I (we) will manage the manure, and the nutrients it contains, as described withi

**Signed:** \_\_\_\_\_ **Date** \_\_\_\_\_  
(Signature) (Print name)

**Name of operation:** Home Farm **Facility ID No.** 62366

**Location of the operation:** 6520 - 215th St.  
(911 address)  
Walcott Iowa 52773  
(Town) (State) (Zip)  
SW 1/4 of the NE 1/4 of Sec 30 T 79N R 2E Hickory Grove Scott  
(1/4 1/4) (1/4) (Section) (Tier & Range) (Township Name) (County)

**Owner and contacts of the animal feeding operation:**

Owner Paustian Enterprises Ltd. Phone 563-284-6814  
 Address 6520 - 215th St., Walcott, IA 52773  
 E-mail address (optional) \_\_\_\_\_ Cell phone (optional) \_\_\_\_\_

Contact person (if different than owner) Kent Paustian Phone 563-284-6814  
 Address 6520 - 215th St., Walcott, IA 52773  
 E-mail address (optional) \_\_\_\_\_ Cell phone (optional) \_\_\_\_\_

Contract company (if applicable) \_\_\_\_\_ Phone \_\_\_\_\_  
 Address \_\_\_\_\_

**This manure management plan is for: (check one)**

existing operation, not expanding  existing operation, expanding  new operation

**Construction and Expansion Dates:** 1970s date of initial construction  
1991 1994 and all expansions

**Table 1. Information about livestock production and manure management system**

1	2	3	4	5	6	7	8
Animal type/ Production phase <sup>a</sup>	Max # of animals confined	Manure Storage Structure <sup>b</sup>	N <sup>c</sup>	P <sub>2</sub> O <sub>5</sub> <sup>c</sup>	gal/space/dy <sup>d</sup>	Days/yr Facility occupied	Annual Manure Produced <sup>e</sup>
Select production phas ▼			0	0	0.0		000
Select production phas ▼			0	0	0.0		000
Select production phas ▼			0	0	0.0		000
Nursery	2800	Pit and Concrete Basin	28	16.3	0.5	365	521,970
Grow - Finish	2100	Deep pits	53	38	0.8	365	626,889
<b>Total Gallons</b>							<b>1,148,859</b>

**Estimated annual animal production** ~6300 animals/year

**Source of Manure Nutrient Content Data** (standard tables, manure analysis, other): manure analysis



# Manure Management Plan Form

## Determining Maximum Allowable Manure Application Rates

**Instructions:** Complete a worksheet for each unique combination of the following factors (crop rotation, optimum crop yield, manure nutrient concentration, remaining crop N need, method of application) that occurs at this operation. Complete form by fillin

### Management Identification (Mgt ID)<sup>g</sup>

### A) Corn - Corn (Nursery)

*(identify this application scenario by letter)*

Method to determine optimum crop yield<sup>h</sup> USDA Iowa Ag Statistics County yields      Timing of application Sp & Fall

Method of application Knifed in or soil injection of liquid manure      Application loss factor 0.98

If spray irrigation is used, identify method \_\_\_\_\_

**Table 2. Manure nutrient concentration**

Manure Nutrient Content (lbs/1000gal or lbs/ton)					
Manure Storage Structure(s) <sup>k</sup>	Deep pit				
Total N <sup>l</sup>	28	P <sub>2</sub> O <sub>5</sub>	16.3		
%TN Available 1st year	100%	2nd year		3rd year	
Available N 1st year <sup>m</sup>	27.4	2nd year <sup>n</sup>	0.0	3rd year <sup>o</sup>	0.0

**Table 3. Crop usage rates<sup>p</sup>**

lb/bu or lb/ton	N	P <sub>2</sub> O <sub>5</sub>
Corn	1.2	0.375
Soybean	3.8	0.8
Alfalfa	50	12.5
Other crop	0	0

\*Use blank space above to add crop not listed.

**Table 4. Calculations for rate based on nitrogen (always required)**

1	Applying Manure For (crop to be grown) <sup>q</sup>		Corn	Corn	Corn	Corn
2	Optimum Crop Yield <sup>n</sup>	bu or ton/acre	193.1	193.1	193.1	193.1
3	P <sub>2</sub> O <sub>5</sub> removed with crop by harvest <sup>r</sup>	lb/acre	72.4	72.4	72.4	72.4
4	Crop N utilization <sup>s</sup>	lb/acre	232	232	232	232
5a	Legume N credit <sup>t</sup>	lb/acre		0	0	0
5b	Commercial N planned <sup>u</sup>	lb/acre	50	50	50	50
5c	Manure N carryover credit <sup>v</sup>	lb/acre		0.0	0.0	0.0
6	Remaining crop N need <sup>w</sup>	lb/acre	182	182	182	182
7	Manure rate to supply remaining N <sup>x</sup>	gal/acre	6622	6622	6622	6622
8	P <sub>2</sub> O <sub>5</sub> applied with N-based rate <sup>y</sup>	lb/acre	108	108	108	108

**Table 5. Calculations for rate based on phosphorus (fill out only if P-based rates are planned)**

9	Commercial P <sub>2</sub> O <sub>5</sub> planned <sup>z</sup>	lb/acre				
10	Manure rate to supply P removal <sup>aa</sup>	gal/acre	4442	4442	4442	4442
11	Manure rate for P based plan <sup>bb</sup>	gal/acre				
12	Manure N applied with P-based plan <sup>cc</sup>	lb/acre	0	0	0	0

**Table 6. Application rates that will be carried over to page 3**

13	Planned manure application rate <sup>dd</sup>	gal/acre	6600	6600	6600	6600
----	---	----------	------	------	------	------

When applicable, manure application rates must be based on the P index value as follows:

(0-2) N-based manure management.

(>2-5) N-based manure management but P application rate cannot exceed two times the P removal rate of the crop schedule.

(>5-10) Until December 31, 2008, P-based manure management while adopting practices to reduce P index to 5 or below.

(>10) No manure application until practices are adopted to reduce P index to 5 or below



# Manure Management Plan Form

## Determining Maximum Allowable Manure Application Rates

**Instructions:** Complete a worksheet for each unique combination of the following factors (crop rotation, optimum crop yield, manure nutrient concentration, remaining crop N need, method of application) that occurs at this operation. Complete form by filling in blanks, yellow-colored cells, and drop down menus. Gray shaded cells will calculate automatically. Footnotes are given on pages 4, 5 and 6.

### Management Identification (Mgt ID)<sup>g</sup>

### A) Corn - Corn (Finishing)

(Identify this application scenario by letter)

Method to determine optimum crop yield<sup>h</sup>

Timing of application

Method of application

Application loss factor

If spray irrigation is used, identify method

**Table 2. Manure nutrient concentration**

Manure Nutrient Content (lbs/1000gal or lbs/ton)				
Manure Storage Structure(s) <sup>k</sup>	Deep pit			
Total N <sup>l</sup>	53	P <sub>2</sub> O <sub>5</sub>	38	
%TN Available 1st year	100%	2nd year	3rd year	
Available N 1st year <sup>m</sup>	51.9	2nd year <sup>n</sup>	0.0	3rd year <sup>o</sup>
			0.0	

**Table 3. Crop usage rates<sup>p</sup>**

lb/bu or lb/ton	N	P <sub>2</sub> O <sub>5</sub>
Corn	1.2	0.375
Soybean	3.8	0.8
Alfalfa	50	12.5
Other crop <input type="text"/>	0	0

\*Use blank space above to add crop not listed.

**Table 4. Calculations for rate based on nitrogen (always required)**

1	Applying Manure For (crop to be grown) <sup>q</sup>		Corn <input type="text"/>	Corn <input type="text"/>	Corn <input type="text"/>	Corn <input type="text"/>
2	Optimum Crop Yield <sup>h</sup>	bu or ton/acre	193.1	193.1	193.1	193.1
3	P <sub>2</sub> O <sub>5</sub> removed with crop by harvest <sup>r</sup>	lb/acre	72.4	72.4	72.4	72.4
4	Crop N utilization <sup>s</sup>	lb/acre	232	232	232	232
5a	Legume N credit <sup>t</sup>	lb/acre		0	0	0
5b	Commercial N planned <sup>u</sup>	lb/acre	50	50	50	50
5c	Manure N carryover credit <sup>v</sup>	lb/acre		0.0	0.0	0.0
6	Remaining crop N need <sup>w</sup>	lb/acre	182	182	182	182
7	Manure rate to supply remaining N <sup>x</sup>	gal/acre	3499	3499	3499	3499
8	P <sub>2</sub> O <sub>5</sub> applied with N-based rate <sup>y</sup>	lb/acre	133	133	133	133

**Table 5. Calculations for rate based on phosphorus (fill out only if P-based rates are planned)**

9	Commercial P <sub>2</sub> O <sub>5</sub> planned <sup>z</sup>	lb/acre				
10	Manure rate to supply P removal <sup>aa</sup>	gal/acre	1906	1906	1906	1906
11	Manure rate for P based plan <sup>bb</sup>	gal/acre				
12	Manure N applied with P-based plan <sup>cc</sup>	lb/acre	0	0	0	0

**Table 6. Application rates that will be carried over to page 3**

13	Planned manure application rate <sup>dd</sup>	gal/acre	3500	3500	3500	3500
----	---	----------	------	------	------	------

When applicable, manure application rates must be based on the P index value as follows:

(0-2) N-based manure management.

(>2-5) N-based manure management but P application rate cannot exceed two times the P removal rate of the crop schedule.

(>5-10) Until December 31, 2008, P-based manure management while adopting practices to reduce P index to 5 or below.

(>10) No manure application until practices are adopted to reduce P index to 5 or below



## Manure Management Plan Form

### Year by Year Manure Management Plan Summary

**Instructions:** Complete this form for each of the next four growing seasons, to demonstrate sufficient land base to apply manure over multiple crop years. If this page is identical for multiple years (e.g. every other year), submit only once for the identical years, and indicate which years the form represents. Footnotes are given on page 6.

Crop year(s): 2011 - 2014 (Home)

1	2	3	4	5	6	7	8	9	10	11	
Field Designation <sup>ee</sup>	Field Location ___ 1/4 of the ___ 1/4 Sec ___ T ___ R ___ Township Name _____, County Name _____	Mgt Id <sup>ff</sup>	Planned Crop	Acres receiving manure <sup>gg</sup>	Own, rent, agreement (include length of agreement) <sup>hh</sup>	P index value <sup>ii</sup>	HEL (Y/N) <sup>jj</sup>	Planned Application		Correct Soil Test for P <sup>ll</sup> (Yes or No)	
								gal/acre	gal/field <sup>kk</sup>		
									0		
Reece North	NW SW 17 79N 2E Hickory Grove, Scott	A	Corn	6.36	Own	1.62	N		0	Yes	
Reece South	W1/2 SW 17 79N 2E Hickory Grove, Scott	A	Corn	64.02	Own	1.31	Y		0	Yes	
Shrine W	E1/2 NE 19 79N 2E Hickory Grove, Scott	A	Corn	57.9	Own	1.72	Y		0	Yes	
Shrine E	S1/2 NW, N1/2 SW 20 79N 2E Hickory Gv, Scott	A	Corn	112.4	Own	4.88	Y		0	Yes	
Stender	NE NW, N1/2 SE, NE1/4 20 79N 2E Hkry Gv, Scott	A	Corn	196.3	Own	1.71	Y		0	Yes	
Puck	SE1/4 19 79N 2E Hickory Grove, Scott	A	Corn	147	Own	1.68	Y		0	Yes	
Ross	SW1/4 20 79N 2E Hickory Grove, Scott	A	Corn	95.7	Own	3.25	Y		0	Yes	
I-80	NW1/4 30 79N 2E Hickory Grove, Scott	A	Corn	83.58	Rent	2.25	N	6600	551628	Yes	
Home	NE1/4 30 79N 2E Hickory Grove, Scott	A	Corn	132.5	Own	3.75	Y	6600	874500	Yes	
Goering Front	SW1/4 29 79N 2E Hickory Grove, Scott	A	Corn	90.5	Rent	2.22	Y	3500	316750	Yes	
Goering Back	SW1/4 29 79N 2E Hickory Grove, Scott	A	Corn	32.3	Rent	2.15	Y	3500	113050	Yes	
Duffy North	E1/2 SW 28 79N 2E Hickory Grove, Scott	A	Corn	43.86	Own	1.83	Y		0	Yes	
Duffy South	E1/2 SW 28 79N 2E Hickory Grove, Scott	A	Corn	38.5	Own	2.07	N		0	Yes	
									0		
									0		
									0		
									0		
									0		
									0		
									0		
									0		
									0		
									0		
									0		
<b>Total acres available for manure application</b>				<b>1100.92</b>	<b>Total gallons that could be applied</b>				<b>1855928</b>		



v. 1/22/2007

# Iowa Phosphorus Index

Credits: Iowa State University  
 USDA National Soil Tilth Laboratory  
 USDA Natural Resource Conservation Service

Field Number	Erosion							+	Runoff				+	Tile / Subsurface Recharge			= Overall	
	Gross	Sediment		Buffer	Enrichment	STP	Erosion		RCN	STP	P App	Runoff		Flow	STP	Tile/Sub		P
	Erosion	Trap Factor	SDR	Factor	Factor	Factor	PI		Factor	Factor	Factor	PI		Factor	Factor	PI		Index
Reese North - NHEL	2.80	1.00	0.67	0.70	1.20	0.78	1.23	1.40	0.15	0.07	0.30	1.00	0.08	0.08	1.62			
Reese South - HEL	2.80	1.00	0.51	0.70	1.20	0.78	0.93	1.40	0.15	0.07	0.30	1.00	0.08	0.08	1.31			
Shrine West - HEL	2.40	1.00	0.49	1.00	1.10	0.89	1.16	1.40	0.28	0.07	0.48	1.00	0.08	0.08	1.72			
Shrine East - HEL	9.50	1.00	0.48	1.00	1.10	0.86	4.36	1.40	0.25	0.07	0.44	1.00	0.08	0.08	4.88			
Stender - HEL	2.80	1.00	0.42	1.00	1.10	0.88	1.16	1.40	0.27	0.07	0.47	1.00	0.08	0.08	1.71			
Puck - HEL	2.50	1.00	0.46	1.00	1.10	0.89	1.12	1.40	0.26	0.07	0.48	1.00	0.08	0.08	1.68			
Ross/Mike - HEL	4.60	1.00	0.51	1.00	1.10	0.99	2.53	1.40	0.39	0.07	0.64	1.00	0.08	0.08	3.25			
I-80 - NHEL	2.80	1.00	0.51	1.00	1.10	0.88	1.54	1.40	0.38	0.07	0.63	1.00	0.08	0.08	2.26			
Home - HEL	5.40	1.00	0.46	1.00	1.10	1.06	2.90	1.40	0.48	0.07	0.77	1.00	0.08	0.08	3.75			
Goering Front - HEL	3.00	1.00	0.50	1.00	1.10	0.95	1.56	1.40	0.35	0.07	0.58	1.00	0.08	0.08	2.22			
Goering Back - HEL	3.00	1.00	0.60	1.00	1.10	0.84	1.67	1.40	0.22	0.07	0.40	1.00	0.08	0.08	2.15			
Duffe North - HEL	3.00	1.00	0.57	1.00	1.10	0.78	1.46	1.40	0.15	0.07	0.30	1.00	0.08	0.08	1.83			
Duffe South - HEL	3.00	1.00	0.62	1.00	1.10	0.81	1.65	1.40	0.18	0.07	0.34	1.00	0.08	0.08	2.07			

Appendix A8: Iowa Ag Statistics  
 County Corn and Soybean Yield Averages, 2004 - 2008

Counties	Corn			Soybeans		
	5-yr. avg. yield (bu./a)	5-yr. ave. yield + 10% (bu./a)	Avg. yield of 4 highest (bu./a)	5-yr. avg. yield (bu./a)	5-yr. ave. yield + 10% (bu./a)	Avg. yield of 4 highest (bu./a)
Monona	151.3	166.4	161.8	44.8	49.3	45.4
Monroe	152.0	167.2	156.0	43.9	48.3	46.7
Montgomery	162.1	178.3	166.3	48.0	52.8	50.6
Muscatine	165.7	182.2	173.3	48.0	52.8	49.1
O'Brien	179.2	197.1	182.5	54.2	59.6	55.6
Osceola	177.0	194.7	179.9	51.2	56.4	52.2
Page	153.9	169.3	159.2	47.6	52.3	50.2
Palo Alto	175.8	193.4	179.1	49.2	54.2	50.5
Plymouth	167.3	184.0	174.8	50.1	55.1	50.4
Pocahontas	178.1	195.9	181.0	49.8	54.8	50.8
Polk	172.4	189.6	177.0	49.4	54.3	50.8
Pottawattamie	174.6	192.0	177.6	50.5	55.5	52.9
Poweshiek	179.5	197.5	181.9	53.8	59.2	55.2
Ringgold	140.9	155.0	147.4	42.9	47.2	47.2
Sac	172.4	189.6	182.0	50.9	56.0	51.9
Scott	175.5	<u>193.1</u>	182.2	52.2	57.4	52.6
Shelby	175.5	193.0	177.5	51.3	56.4	52.1
Sioux	177.5	195.3	182.7	55.2	60.7	55.6
Story	180.1	198.1	185.1	52.0	57.2	53.5
Tama	178.9	196.8	180.4	53.9	59.3	55.1
Taylor	145.9	160.5	148.7	44.6	49.0	47.3
Union	154.7	170.1	156.3	47.0	51.7	49.4
Van Buren	153.8	169.2	161.3	46.5	51.1	48.0
Wapello	157.9	173.7	163.3	47.5	52.3	48.9
Warren	156.4	172.0	161.8	49.7	54.7	51.9
Washington	174.7	192.1	180.1	50.5	55.6	50.9
Wayne	142.4	156.6	152.3	44.6	49.0	48.2
Webster	181.1	199.2	184.6	49.3	54.2	49.9
Winnebago	181.1	199.2	182.9	49.9	54.9	51.9
Winneshiek	174.6	192.1	175.8	48.7	53.6	50.1
Woodbury	161.3	177.4	169.2	45.9	50.5	46.4
Worth	175.3	192.8	176.6	47.8	52.6	49.6
Wright	179.5	197.4	183.4	50.0	55.0	51.0

## RUSLE2 Profile Erosion Calculation Record

Staub Farm, Reece N & S, Stender and I-80 (Paustain)

**Inputs:**

Location: Iowa\Scott County

Soil: 120C2 TAMA SILTY CLAY LOAM, 5 TO 9 PERCENT SLOPES, MODERATELY ERODED\TAMA silty clay loam 100%

Slope length (horiz): 200 ft

Avg. slope steepness: 7.0 %

Management	Vegetation	Yield units	Yield (# of units)
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	195.00
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	195.00

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 2.8 t/ac/yr

Detachment on slope: 2.8 t/ac/yr

Soil loss for cons. plan: 2.8 t/ac/yr

Sediment delivery: 2.8 t/ac/yr

Crit. slope length: -- ft

Surf. cover after planting: -- %

Date	Operation	Vegetation	Surf. res. cov. after op, %
11/1/0	Harvest, killing crop 70pct standing stubble		76
11/10/0	Manure injector, liquid low disturb.30 inch		92
11/19/0	Chisel, st. pt. 12 in deep		71
4/1/1	Rotary hoe, residue		71
5/10/1	planter, double disk opnr	Corn, grain	69
10/20/1	Harvest, killing crop 70pct standing stubble		76
11/1/1	Manure injector, liquid low disturb.30 inch		92
11/15/1	Chisel, st. pt. 12 in deep		70
4/1/2	Rotary hoe, residue		70
4/18/2	Planter, double disk opnr	Corn, grain	71



## RUSLE2 Profile Erosion Calculation Record

Shrine W (Paustain)

**Inputs:**

Location: Iowa\Scott County

Soil: 120C TAMA SILTY CLAY LOAM, 5 TO 9 PERCENT SLOPE TAMA silty clay loam 95%

Slope length (horiz): 200 ft

Avg. slope steepness: 7.0 %

Management	Vegetation	Yield units	Yield (# of units)
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	200.00
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	200.00

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 2.4 t/ac/yr

Detachment on slope: 2.4 t/ac/yr

Soil loss for cons. plan: 2.4 t/ac/yr

Sediment delivery: 2.4 t/ac/yr

Crit. slope length: -- ft

Surf. cover after planting: -- %

Date	Operation	Vegetation	Surf. res. cov. after op, %
11/1/0	Harvest, killing crop 70pct standing stubble		76
11/10/0	Manure injector, liquid low disturb.30 inch		93
11/19/0	Chisel, st. pt. 12 in deep		72
4/1/1	Rotary hoe, residue		72
5/10/1	planter, double disk opnr	Corn, grain	70
10/20/1	Harvest, killing crop 70pct standing stubble		77
11/1/1	Manure injector, liquid low disturb.30 inch		92
11/15/1	Chisel, st. pt. 12 in deep		71
4/1/2	Rotary hoe, residue		71
4/18/2	Planter, double disk opnr	Corn, grain	72

## RUSLE2 Profile Erosion Calculation Record

Shrine E (Paustain)

**Inputs:**

Location: Iowa\Scott County

Soil: 442D2 TAMA, SANDY SUBSTRATUM-DICKINSON COMPLEX, 9 TO 14 PERCENT SLOPES, MODERATELY ERODED\TAMA silty clay loam 50%

Slope length (horiz): 150 ft

Avg. slope steepness: 12 %

Management	Vegetation	Yield units	Yield (# of units)
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	112.00
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	112.00

Contouring: b. absolute row grade 3 percent

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 4.0 t/ac/yr

Soil loss erod. portion: 9.5 t/ac/yr

Detachment on slope: 9.5 t/ac/yr

Soil loss for cons. plan: 9.5 t/ac/yr

Sediment delivery: 9.5 t/ac/yr

Crit. slope length: 150 ft

Surf. cover after planting: -- %

Date	Operation	Vegetation	Surf. res. cov. after op, %
11/1/0	Harvest, killing crop 70pct standing stubble		57
11/10/0	Manure injector, liquid low disturb.30 inch		78
11/19/0	Chisel, st. pt. 12 in deep		52
4/1/1	Rotary hoe, residue		52
5/10/1	planter, double disk opnr	Corn, grain	50
10/20/1	Harvest, killing crop 70pct standing stubble		57
11/1/1	Manure injector, liquid low disturb.30 inch		78
11/15/1	Chisel, st. pt. 12 in deep		51
4/1/2	Rotary hoe, residue		51
4/18/2	Planter, double disk opnr	Corn, grain	52

## RUSLE2 Profile Erosion Calculation Record

Goering and Duffy (Paustain)

**Inputs:**

Location: Iowa\Scott County

Soil: 920C2 TAMA SILTY CLAY LOAM, SANDY SUBSTRATUM, 5 TO 9 PERCENT SLOPES, MODERATELY ERODED\TAMA silty clay loam 100%

Slope length (horiz): 200 ft

Avg. slope steepness: 7.0 %

Management	Vegetation	Yield units	Yield (# of units)
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	168.00
CMZ 04\c.Other Local Mgt Records\Paustain	Corn, grain	bushels	168.00

Contouring: b. absolute row grade 3 percent

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 4.0 t/ac/yr

Soil loss erod. portion: 3.0 t/ac/yr

Detachment on slope: 3.0 t/ac/yr

Soil loss for cons. plan: 3.0 t/ac/yr

Sediment delivery: 3.0 t/ac/yr

Crit. slope length: 200 ft

Surf. cover after planting: -- %

Date	Operation	Vegetation	Surf. res. cov. after op, %
11/1/0	Harvest, killing crop 70pct standing stubble		71
11/10/0	Manure injector, liquid low disturb.30 inch		89
11/19/0	Chisel, st. pt. 12 in deep		66
4/1/1	Rotary hoe, residue		66
5/10/1	planter, double disk opnr	Corn, grain	64
10/20/1	Harvest, killing crop 70pct standing stubble		71
11/1/1	Manure injector, liquid low disturb.30 inch		89
11/15/1	Chisel, st. pt. 12 in deep		65
4/1/2	Rotary hoe, residue		65
4/18/2	Planter, double disk opnr	Corn, grain	66



SCOTT COUNTY HEALTH DEPARTMENT  
Administrative Center  
600 W. 4<sup>th</sup> Street  
Davenport, Iowa 52801-1030  
Office: (563) 326-8618 Fax: (563)326-8774  
[www.scottcountyiowa.com/health](http://www.scottcountyiowa.com/health)



July 9, 2012

To: Dee Bruemmer  
County Administrator

From: Edward R. Rivers  
Director

Subject: Review of Paustian Enterprises Ltd., 6520 215<sup>th</sup> Street, Walcott, IA Confinement  
Animal Feeding Operations and Manure Management Application

On July 6, 2012, Larry Linnenbrink, Environmental Health Coordinator and Josh Sobaski, Environmental Specialist, Iowa Department of Natural Resources, met with Kent, Mike, Ross, and Tom Paustian at the above mentioned property to inspect the proposed site location of the nursery building.

There are two wells located on the property which the Health Department permitted and inspected during construction. Both wells are classified as Deep Wells with the well next to the farm house 450 feet and the well on the south end of the buildings 490 feet from the proposed nursery formed manure storage pit.

After reviewing the Construction Permit Application section on manure management, the Health Department concurs that this portion of the application conforms to the requirements set by the Iowa Department of Natural Resources.

Cc: Tim Huey

ENC: