



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

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October 12, 2012

TO: INTERESTED PARTIES

RE: Gourley Brothers Hog Feedlot


The Minnesota Pollution Control Agency (MPCA) has prepared Board Item documents for the proposed Gourley Brothers Hog Feedlot. The Board packet includes:

- Proposed Findings of Fact, Conclusions of Law, and Order for the Environmental Assessment Worksheet (request for a negative declaration on the need for an Environmental Impact Statement). Appended to this document are the MPCA's responses to comments received on the Environmental Assessment Worksheet.

In an effort to save postage and resources, the above documents may be reviewed at the following locations: the MPCA offices in St. Paul and Brainerd; the Minneapolis Public Library at 300 Nicollet Mall, Minneapolis; and the Kitchigami Regional Library at 212 Park Avenue, Pine River. The Gourley Brothers Hog Feedlot Board Packet may also be viewed on our MPCA website at <http://www.pca.state.mn.us/about/board/bdagenda.html>. Requests for paper copies of these Board documents may be made by contacting the St. Paul office at 651-757-2101.

The Board Item will be presented at the MPCA Board Meeting. Please refer to the enclosed Board Agenda for specific location, dates, and times. We encourage your attendance at the Board Meeting. If you have any questions regarding the Board Item or the specifics of the meeting, feel free to contact Charles Peterson of my staff at 651-757-2856.

Sincerely,


Gaylen F. Reetz
Director
Watershed Division

GR:mbo

Enclosures

MINNESOTA POLLUTION CONTROL AGENCY

Watershed Division

Board Item Cover Sheet

MEETING DATE:	October 22, 2012	DATE MAILED:	October 12, 2012
Presenter:	Charles Peterson CP	Phone Number:	651-757-2856
Supervisor:	Craig Affeldt CA	Phone Number:	651-757-2181
Division Director:	Gaylen Reetz GR	Phone Number:	651-757-2664
Asst. Co.:	Rebecca Flood	Phone Number:	651-757-2022
Deputy Commissioner:	Michelle Beeman MB	Phone Number:	651-757-2013
Attorney:	Patrick Whiting	Phone Number:	651-757-1198

TITLE OF BOARD ITEM: Gourley Brothers Hog Feedlot – Request for Approval of Findings of Fact, Conclusions of Law, and Order, and Authorization to Issue a Negative Declaration on the Need for an Environmental Impact Statement

LOCATION: Leslie Township Todd County

TYPE OF ACTION: Environmental Review

RECOMMENDED ACTION: Approval of Findings of Fact, Conclusions of Law, and Order, and Authorization to Issue a Negative Declaration on the Need for an Environmental Impact Statement

ISSUE STATEMENT:

Minnesota Pollution Control Agency (MPCA) staff requests that the MPCA Citizens' Board (Board) approve the Findings of Fact, Conclusions of Law, and Order, and authorize the issuance of a Negative Declaration on the need for an Environmental Impact Statement for the proposed Gourley Brothers hog feedlot in Todd County.

The Gourley Brothers are proposing to build a total confinement swine facility in Leslie Township, Todd County. The facility will house 2,930 sows, 300 nursery pigs, and 750 replacement gilts, for a maximum physical capacity of 1,412 animal units (AUs). The proposed facility will be 230 feet wide by 424 feet long. The facility will have a 12-foot deep, below ground, concrete liquid manure storage area for holding manure generated by the swine. All of the manure generated at the facility will be transferred to area landowners/operators and will be applied during the fall after the crops have been harvested from the designated land application sites. Application has been made for coverage under the 2011-2016 State of Minnesota General Livestock Production Permit, National Pollutant Discharge Elimination System Permit (NPDES)/State Disposal System (SDS) Permit MNG440000.

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The MPCA is the governmental unit responsible for preparing an Environmental Assessment Worksheet (EAW) for the construction of animal feedlots capable of housing more than 1,000 AUs, as specified in Minn. R. 4410.4300, subp. 29. MPCA staff prepared the EAW for this proposed project in order to assess the potential for significant environmental effects and to determine the need for an Environmental Impact Statement (EIS). As part of the process, a 30-day comment period was held, during which interested parties raised concerns about impacts related to ground and surface water quality and air quality. The preparation of an EIS was requested in 4 of the 12 comment letters.

A summary of the environmental issues associated with the proposed project is included in the proposed Findings of Fact, Conclusions of Law, and Order. Based on the analysis contained in the EAW, the comments submitted by the public during the 30-day comment period, MPCA staff's responses to those comments, and other information in the record, MPCA staff has concluded that this proposed project does not have the potential for significant environmental effects. Accordingly, MPCA staff recommends that the Board approve the proposed Findings of Fact, Conclusions of Law, and Order, and authorize the issuance of a Negative Declaration on the need for an EIS.

ATTACHMENTS:

1. Proposed Findings of Fact, Conclusions of Law, and Order
2. Appendix A to Findings - Comment Letters Received on the EAW
3. Appendix B to Findings - MPCA Staff Responses to Comments

MINNESOTA POLLUTION CONTROL AGENCY
Watershed Division

*Gourley Brothers Hog Feedlot
Request for Approval of Findings of Fact, Conclusions of Law and Order, and
Authorization to Issue a Negative Declaration on the
Need for an Environmental Impact Statement*

October 22, 2012

ISSUE STATEMENT

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The Gourley Brothers are proposing to build a total confinement swine facility in Leslie Township, Todd County. The facility will house 2,930 sows, 300 nursery pigs, and 750 replacement gilts, for a maximum physical capacity of 1,412 animal units (AUs). The proposed facility will be 230 feet wide by 424 feet long. The facility will have a 12-foot deep, below ground, concrete liquid manure storage area for holding manure generated by the swine. All of the manure generated at the facility will be transferred to area landowners/operators and will be applied during the fall after the crops have been harvested from the designated land application sites. Application has been made for coverage under the 2011-2016 State of Minnesota General Livestock Production Permit, National Pollutant Discharge Elimination System Permit (NPDES)/State Disposal System (SDS) Permit MNG440000.

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A summary of the environmental issues associated with the proposed project is included in the proposed Findings of Fact, Conclusions of Law, and Order. Based on the analysis contained in the EAW, the comments submitted by the public during the 30-day comment period, MPCA staff's responses to those comments, and other information in the record, MPCA staff has concluded that this proposed project does not have the potential for significant environmental effects. Accordingly, MPCA staff recommends that the Board approve the proposed Findings of Fact, Conclusions of Law, and Order, and authorize the issuance of a Negative Declaration on the need for an EIS.

I. BACKGROUND:

A. Project Description

The Gourley Brothers are proposing to build a total confinement swine facility in Leslie Township, Todd County. The facility will house 2,930 sows, 300 nursery pigs, and 750 replacement gilts, for a maximum physical capacity of 1,412 AUs. The proposed facility will be 230 feet wide by 424 feet long. The facility will have a 12-foot deep, below ground, concrete liquid manure storage area for holding manure generated by the swine. All of the manure generated at the facility will be transferred to area landowners/operators and applied during the fall after the crops have been harvested from the designated land application sites.

B. Procedural History

Minn. R. 4410.4300, subp. 29 Animal feedlots, requires the preparation of an EAW for projects involving the construction of an animal feedlot with a capacity of 1,000 or more AUs. The proposed barn has a capacity greater than 1,000 AUs, thereby making an EAW mandatory for the project.

The EAW was prepared by MPCA staff on the proposed project following procedures described in the Environmental Quality Board (EQB) rules (Minn. R. 4410.1400), and distributed to the EQB mailing list and other interested parties on July 20, 2012, pursuant to Minn. R. 4410.1500.

The public comment period for the EAW began on July 23, 2012, and ended on August 22, 2012. During the 30-day comment period, the MPCA received 1 comment letter from the Minnesota Department of Natural Resources, and 11 letters from citizens. The MPCA staff prepared responses to the comments and a proposed Findings of Fact, Conclusions of Law, and Order (Attachment 1), recommending that no EIS be required (Negative Declaration). Attachment 2 contains a list of the comment letters received and copies of the comment letters (Appendix A to the proposed Findings of Fact, Conclusions of Law, and Order). The comments on the EAW raised the following primary issues, which are addressed in Attachment 3, Appendix B to the proposed Findings of Fact, Conclusions of Law, and Order.

The principal environmental impacts addressed in the EAW and raised in comments were as follows:

- surface water quality
- groundwater quality
- land application of manure
- air quality
- compliance and enforcement
- public health
- safety

The MPCA prepared written responses to the comment letters received during the 30-day public comment period. The comment letters received and the responses to the comments are included as Appendix B to Attachment 1, the proposed Findings of Fact, Conclusions of Law, and Order.

II. DISCUSSION:

Minn. R. 4410.1700 provides four criteria that must be considered by a responsible governmental unit in deciding whether a project has the potential for significant environmental effects. These criteria are: a) the type, extent, and reversibility of environmental effects; b) cumulative potential effects; c) the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority; and d) the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs. These criteria were applied to the proposed project and are fully discussed in Attachment 1, the proposed Findings of Fact, Conclusions of Law, and Order, and in Appendix B to Attachment 1, the MPCA Responses to Comments on the EAW.

III. CONCLUSIONS:

MPCA staff believes that the information in the EAW, as supplemented by the Responses to Comments and the entire record for this proposed project, is adequate to make a reasoned decision on the need for an EIS, as set forth in more detail in Attachment 1, the proposed Findings of Fact, Conclusions of Law, and Order and Appendices A and B. Appendix A is a list of comment letters received and copies of the letters, and Appendix B is the MPCA staff's responses to comments. Based on this

record, MPCA staff concludes that the potential environmental effects that are reasonably expected to occur from the proposed project were identified during the environmental review and will be mitigated by MPCA rule requirements and binding conditions to be placed in MPCA permits, including the NPDES/SDS Permit, as well as other state and local regulations and ordinances that apply to the proposed project. MPCA staff further concludes that, based on the analysis presented in the proposed Findings of Fact, Conclusions of Law, and Order, and evidence in the record of this proceeding, the proposed project does not have the potential for significant environmental effects and the preparation of an EIS is not warranted.

IV. RECOMMENDATION:

The MPCA staff recommends that, in accordance with the standard and criteria set forth in Minn. R. 4410.1700, the Board: 1) approve the Findings of Fact, Conclusions of Law, and Order, which conclude that the proposed project does not have the potential for significant environmental effects; 2) authorize the Commissioner to publish a Negative Declaration indicating that the proposed project will not require an EIS; and 3) adopt the following staff resolution.

SUGGESTED STAFF RESOLUTION

BE IT RESOLVED, that, in accordance with the standard and criteria set forth in Minn. R. 4410.1700, the Minnesota Pollution Control Agency (MPCA) approves and adopts the attached Findings of Fact, Conclusions of Law, and Order, which conclude that the Gourley Brothers Hog Feedlot, analyzed in the Environmental Assessment Worksheet and proposed by the Gourley Brothers, does not have the potential for significant environmental effects. The Commissioner is authorized to execute the Findings of Fact, Conclusions of Law, and Order on behalf of the MPCA.

BE IT FURTHER RESOLVED, that the MPCA authorizes the Commissioner, on behalf of the MPCA, to publish a Negative Declaration on the Need for an Environmental Impact Statement.

**STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY**

**IN THE MATTER OF THE DECISION
ON THE NEED FOR AN ENVIRONMENTAL
IMPACT STATEMENT FOR THE PROPOSED
GOURLEY BROTHERS HOG FEEDLOT
LESLIE TOWNSHIP, TODD COUNTY, MINNESOTA**

**FINDINGS OF FACT
CONCLUSIONS OF LAW
AND ORDER**

FINDINGS OF FACT

The above-entitled matter came before the Minnesota Pollution Control Agency (MPCA) Citizens' Board (Board) at a regular meeting held in St. Paul, Minnesota on October 22, 2012. Based on MPCA staff review, the EAW, comments and information received during the comment period, and other information in the record of the MPCA, the MPCA hereby makes the following Findings of Fact, Conclusions of Law, and Order.

Project Description

1. The Gourley Brothers (Project Proposer) are proposing to build a total confinement swine barn in Leslie Township, Todd County. The Gourley Brothers Hog Feedlot (Project) will house 2,930 sows, 300 nursery pigs, and 750 replacement gilts, for a maximum physical capacity of 1,412 animal units. The proposed total confinement barn will be 230 feet wide by 424 feet long. The proposed barn will have a 12-foot deep, below-barn concrete liquid manure storage area for holding manure generated by the swine. All of the manure generated at the Project will be transferred to area landowners/operators and will be applied during the fall after the crops have been harvested from the designated land application sites.
2. The proposed barn will be power ventilated.
3. The proposed barns will have 12-foot deep concrete pits beneath the barn. The storage capacity for the barn will be about 8,750,000 gallons, which exceeds minimum storage capacity requirement of 9 months.
4. Transferred ownership of manure takes place when the manure produced by 300 or more animal units is applied to fields not owned or leased by the owner of the animal feedlot or manure storage area. Any person receiving the manure shall comply with Minn. R. 7020.2225 subpart 1, item C. All manure and process wastewater applications to land must meet the requirements of this part except where specifically exempted. The 2011-2016 State of Minnesota General Livestock Production Permit (Feedlot Permit) Part II, item C, of the Feedlot Permit details requirements for the Project Proposer when ownership of manure is transferred.
5. The permit application for coverage of the proposed Project under the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) General Feedlot Permit was submitted to the MPCA on May 3, 2012.

6. The proposed Project is a new feedlot site and, therefore, no previous environmental review has been completed on this Project.

Procedural History

7. Pursuant to Minn. R. 4410.4300, subp. 29, MPCA staff prepared an Environmental Assessment Worksheet (EAW), dated July 19, 2012, on the proposed Project. Pursuant to Minn. R. 4410.1500, the MPCA notified the public of the availability of the EAW for public comment. A notice of availability of the EAW was published in the *EQB Monitor* on July 23, 2012.
8. The MPCA provided a news release to media in Todd, Otter Tail, Morrison, Stearns, and Douglas Counties, as well as other interested parties, on July 24, 2012. The notice of the availability of the EAW was published in the *EQB Monitor* on July 23, 2012, and the EAW was made available for review on the MPCA website at <http://www.pca.state.mn.us/news/eaw/index.html>.
9. MPCA Staff visited the Project site on August 14, 2012.
10. The public comment period for the EAW began on July 23, 2012, and ended on August 22, 2012. During the 30-day comment period, the MPCA received 1 comment letter from the Minnesota Department of Natural Resources (DNR) and 11 letters from citizens. A list of the comment letters received and copies of the letters are included as Appendix A to these Findings.
11. The MPCA prepared written responses to the comment letters received during the comment period. The responses to the comments are included as Appendix B to these findings, and are hereby incorporated into these findings by reference.

Criteria for Determining the Potential for Significant Environmental Effects

12. Under Minn. R. 4410.1700, the MPCA must order an Environmental Impact Statement (EIS) for projects that have the potential for significant environmental effects. In deciding whether a project has the potential for significant environmental effects, the MPCA must compare the impacts that may be reasonably expected to occur from the project with the criteria set forth in Minn. R. 4410.1700, subp. 7. The criteria are as follows:
 - a. Type, extent, and reversibility of environmental effects;
 - b. Cumulative potential effects. The responsible governmental unit (RGU) shall consider the following factors: whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the proposer to minimize the contributions from the project;

- c. The extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project; and
- d. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs.

**The MPCA Findings with Respect to Each of These Criteria
Are Set Forth Below**

Type, Extent, and Reversibility of Environmental Effects

- 13. The first criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is the “type, extent, and reversibility of environmental effects” (Minn. R. 4410.1700, subp. 7. A). The MPCA findings with respect to this criterion are set forth below.
- 14. The types of impacts that may reasonably be expected to occur from the Project include the following:
 - a. Air quality impacts related to hydrogen sulfide emissions;
 - b. Air quality impacts related to ammonia emissions;
 - c. Air quality impacts related to odors;
 - d. Impacts on water quality; and
 - e. Impacts related to water appropriation.
- 15. Other issues raised by commenters that may be expected to occur from the Project include the following:
 - a. Impacts related to public health;
 - b. Impacts related to safety; and
 - c. Impacts related to compliance and enforcement.
- 16. With respect to the extent of impacts that are reasonably expected to occur from the proposed Project, the MPCA makes the findings set forth below.
- 17. Air quality modeling was performed to estimate air concentrations of hydrogen sulfide and ammonia, and odor intensity that will be created by the proposed feedlot. The air quality model provides an estimate of ambient air concentrations and odor intensities at the property lines for the feedlot and at the feedlot’s 35 nearest neighbors located in the three-mile by three-mile grid around the proposed feedlot site. The model considered air emissions from eight neighboring feedlots.

**Gourley Brothers Hog Feedlot
Hourly Average Hydrogen Sulfide and Ammonia Concentrations and
Odor Intensity in Ambient Air**

Proposed Site Property Boundary	Hydrogen Sulfide (ppb) ^a	Maximum Hourly Ammonia ($\mu\text{g}/\text{m}^3$) ^b	Maximum Hourly Odor Intensity (OU, d/t) ^c	Frequency "Faint" Odor Threshold is Exceeded ^c
North	29.32	800	78	0.02%
South	25.53	410	75	< 0.01%
East	26.39	488	89	0.01%
West	27.71	1,145	77	< 0.01%

^a. The air quality standard for hydrogen sulfide is 30 ppb (parts per billion) as a half-hour average not to exceed more than two times in any five-day period. The results in the tables include a background concentration of 17 ppb.

^b. The acute iHRV (inhalation health risk value) for ammonia is 3,200 $\mu\text{g}/\text{m}^3$ (micrograms per cubic meter). The results in the table include a background concentration of 148 $\mu\text{g}/\text{m}^3$.

^c. Odor impact assessment based on odor units (OUs). Odor intensities and their perceived strength: very faint (25 – 72), faint (72 – 212), moderate (212 – 624) strong (624 – 1,834), and very strong (>2,140)¹.

Air Quality Impacts Related to Hydrogen Sulfide Emissions

18. The Project Proposer submitted a report on air modeling that used *CALPUFF*, an advanced non-steady-state meteorological and air quality modeling system. *CALPUFF* has been adopted by the U.S. Environmental Protection Agency in its Guideline on Air Quality Models as the preferred model for assessing long-range transport of pollutants and their impacts on near-field applications involving complex meteorological conditions. The modeling system consists of three main components: *CALMET* (a diagnostic three-dimensional meteorological model), *CALPUFF* (an air quality dispersion model), and *CALPOST* (a post-processing package). The *CALPUFF* air quality model was selected to estimate the property-line and nearest-neighbor odorous gas concentrations because of its ability to account for calm wind conditions.
19. The air modeling results indicated that the proposed Project will not cause the Minnesota ambient air quality standard for hydrogen sulfide to be exceeded. The *CALPUFF*-predicted third highest Project-specific contribution to the ambient hydrogen sulfide concentration was 12.32 ppb. When a background hydrogen sulfide concentration of 17 ppb was added to the *CALPUFF* prediction, the maximum property-line hourly concentration was 29.32 ppb, which indicates that the half-hour standard of 30 ppb will not be violated. Thus, exceedances of the hydrogen sulfide standard are not expected to occur, and the proposed Project is expected to be in compliance with the applicable air quality standards for hydrogen sulfide.

¹ Jacobson L. D. *et al.* 2000. Development of an odor rating system to estimate setback distances from animal feedlots: odor for feedlots setback estimation tool (OFFSET). Final Report. Prepared by the Department of Biosystems and Agricultural Engineering, University of Minnesota, St. Paul, MN. 26 pp.

20. The air modeling results also indicated that the proposed Project will not cause the subchronic hydrogen sulfide iHRV to be exceeded at neighboring residences. The maximum estimated facility-specific, 13-week, time-averaged hydrogen sulfide concentration for the feedlot's nearest neighbors was $0.4 \mu\text{g}/\text{m}^3$. When a background concentration of $1 \mu\text{g}/\text{m}^3$ is added to the *CALPUFF* estimate, the 13-week neighbor hydrogen sulfide maximum concentration was $1.4 \mu\text{g}/\text{m}^3$, which is below the subchronic hydrogen sulfide iHRV of $10 \mu\text{g}/\text{m}^3$.

Air Quality Impacts Related to Ammonia Emissions

21. The modeling results for ammonia indicate that the proposed Project will not exceed the acute ammonia iHRV. The model predicted a maximum hourly property-line concentration of $997 \mu\text{g}/\text{m}^3$. When the background concentration of $148 \mu\text{g}/\text{m}^3$ was added to the prediction, the maximum property line ammonia concentration was $1,145 \mu\text{g}/\text{m}^3$, which is below the acute ammonia iHRV of $3,200 \mu\text{g}/\text{m}^3$.
22. The modeling results also indicate that the proposed Project would not result in air concentrations of ammonia exceeding the chronic ammonia iHRV at the neighboring residences. The estimated maximum one-year time-averaged ammonia concentration among the Project's neighbors was $27.86 \mu\text{g}/\text{m}^3$. When a background ammonia concentration of $5.72 \mu\text{g}/\text{m}^3$ was added to the *CALPUFF* estimate, the maximum annual ammonia concentration at any neighboring residence was $33.58 \mu\text{g}/\text{m}^3$, which is below the chronic ammonia iHRV of $80 \mu\text{g}/\text{m}^3$. Thus, the chronic ammonia iHRV is not expected to be exceeded.

Air Quality Impacts Related to Odor

23. Ambient air quality standards are not established for the regulation of odor in Minnesota; however, the *CALPUFF* model was used to estimate the ground level odor intensities at the feedlot's property lines and at neighboring residences. As indicated in the table in finding number 17, the maximum hourly odor intensity predicted at the expanded feedlot's effective property lines was 89 OUs. This would be above the "faint" odor threshold of 72 OUs, but below the "moderate" odor threshold of 212 OUs.
24. With respect to the reversibility of air quality impacts that are reasonably expected to occur from the proposed Project, the MPCA makes the findings set forth below.
25. Air emissions from the Project will continue while the Project remains in operation and will cease if the Project is temporarily or permanently closed. While in operation, the proposed Project is expected to meet applicable air quality standards and criteria. Although *CALPUFF* predicts no exceedences of hydrogen sulfide standards or ammonia health benchmarks, if excessive air emissions or violations of the ambient hydrogen sulfide air standards were to occur, or if iHRVs for ammonia were exceeded, corrective measures could be implemented. Such measures could include the initiation of a complaint investigation by the MPCA and requiring the Project Proposer to make operational and maintenance changes. In addition, as noted in the Project Proposer's Air Emissions Plan and Complaint Response Protocol, if higher than expected levels of air or odor emissions are anticipated, notification will be made to neighbors.

26. Comments received that expressed concerns regarding potential effects to air quality: Although some of the comment letters expressed a general concern for the potential negative effects of the proposed Project to air quality, none of them included air quality data or detailed comments that clearly expressed concerns about the methods or results of the air dispersion modeling, the proposed Project's design features, or the air and odor emission mitigation measures. As discussed above in Findings 18 through 25, the analysis indicates that the effects on air quality that are reasonably expected to occur are not significant.
27. The MPCA finds that the information presented in the EAW and other information in the environmental review record is adequate to assess the impacts on air quality that are reasonably expected to occur from the proposed Project. These impacts have been considered during the review process and methods to prevent significant adverse impacts have been developed.
28. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of impacts on air quality that are reasonably expected to occur from the Project.

Impacts on Water Quality

29. With respect to the extent of potential water quality impacts that are reasonably expected to occur from the proposed Project, the MPCA makes the findings set forth below.
30. The Project site itself will be required by the 2011-2016 Feedlot General NPDES/SDS Permit to meet a zero discharge standard. The 2011-2016 Feedlot General NPDES/SDS Permit requires Stormwater Pollution Prevention and Management Plans that include best management practices (BMPs) for the operation of the Project to be developed and implemented on the site.
31. All livestock will be housed in an engineered total confinement building and not have access to surface waters. Manure will be stored in a manure storage structure that meets the design criteria of Minn. R. 7020.2100.
32. All manure generated at the Project will be transferred to nearby landowners. The manure is expected to be applied at agronomic rates. Fields available for land application of manure are prioritized based upon phosphorus and potassium soil test values. Fields with lower levels of phosphorus and potassium receive manure first. Other factors used to determine nutrient needs are crop grown, yield goal, organic matter content, manure credits, and other legume credits. Nutrient application rates will be determined by utilizing recommendations provided by the University of Minnesota Extension Service.
33. The 2011-2016 Feedlot General NPDES/SDS Permit prohibits the land application of manure to snow-covered or frozen ground, or after December 1, except emergency applications. Solid manure can be land-applied to frozen and snow covered ground in emergency applications subject to the following conditions:

- a. Manure is applied more than 300 feet from sensitive features including lakes, streams, open tile inlets, sinkholes, water supply wells, mines and quarries, intermittent streams, unbermed drainage ditches, or public waters wetlands;
 - b. No active snowmelt is occurring that can create runoff from an application field, as determined by two or more inches of snow on the field and maximum temperatures that exceed 40 degrees Fahrenheit or are predicted to exceed 40 degrees Fahrenheit within 24 hours of spreading manure;
 - c. Prohibited when the probability of rainfall over 0.25 inches is greater than 50 percent, as predicted by the National Weather Service, within 24 hours of the end of the application period;
 - d. Slopes must be less than or equal to six percent on entire area to be applied;
 - e. Water or ice cannot occupy tillage furrows to the extent that additional snowmelt or precipitation cannot be contained between furrows or in other depressional storage areas within the field; and
 - f. Fields used for land application must meet a total phosphorus loss risk index number of two or less (low to very low relative risk), as calculated according to the Minnesota Phosphorus Index, the University of Minnesota, Department of Soil, Water, and Climate.
34. In order to avoid contaminating the groundwater at the manure application sites when the ownership of manure is transferred, the permittees must inform the receiving landowners of the nutrient content of the manure and applicable rules pertaining to the application of manure.
35. The Project Proposer must retain the following information when transferring manure.
- Name and address of facility where manure is generated;
 - Dates and quantity of manure transferred;
 - Manure analysis results;
 - Name and address of entity or individual taking manure from feedlot;
 - Name of company or individual that applied manure;
 - Minnesota Department of Agriculture license number of commercial applier; and
 - Field specific location of manure application areas.
36. The land application of manure, if done improperly, can adversely impact surface-water resources through manure-laden runoff or manure residue leaching into drain tile lines that outfall to surface waters. Therefore, Minnesota rule requirements and/or county setback requirements, whichever are more restrictive, must be observed around drain tile intakes located within and adjacent to manure application areas and near other surface-water resources. Additional requirements of the 2011-2016 Feedlot General NPDES/SDS Permit are included to minimize the potential for manure applied at manure application sites to come in contact with runoff and enter surface waters.
37. The quality of runoff from land application areas for the manure is not expected to significantly change if managed in accordance with the 2011-2016 Feedlot General NPDES/SDS Permit. Nutrients from manure will replace nutrients provided by other fertilizers, and improved soil tilth through the use of organic fertilizer and immediate incorporation of manure may improve runoff. Therefore, no additional impact to the quality of surface or groundwater is expected to occur as a result of increased acres being utilized for land application of manure.

38. With respect to the reversibility of water quality impacts that are reasonably expected to occur from this proposed Project, the MPCA makes the findings set forth below.
39. The prevention of adverse effects on water quality due to manure storage and application is addressed in the 2011-2016 Feedlot General NPDES/SDS Permit. Significant adverse impacts to water quality are not expected; however, if water quality impacts were to occur, the operation and management of the feedlot can be modified, thus, minimizing or eliminating any impacts to waters. Therefore, the water quality impacts that are reasonably expected to occur from the proposed Project are found to be reversible.
40. Comments received that expressed concerns regarding potential effects to water quality: Although some of the comment letters expressed a general concern for the potential negative effects of the proposed Project to water quality, none of them included water quality data, the proposed Project's design features, or the stormwater runoff mitigation measures. As discussed above in Findings 29 through 39, the analysis indicates that the effects on water quality that are reasonably expected to occur are not significant.
41. The MPCA finds that information presented in the EAW and other information in the environmental review record is adequate to assess potential impacts to the quality of surface and groundwater that are reasonably expected to occur from the proposed Project. Measures to prevent or mitigate these impacts have been developed and required as proposed permit conditions.
42. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of impacts related to water quality that are reasonably expected to occur.

Impacts Related to Water Appropriation

43. A new well will be drilled for this Project. The expected depth of the well is between 50 and 125 feet. The total water usage for the Project is expected to be approximately 6.62 million gallons per year. The projected 25-year service consumption is 165.5 million gallons for the Project.
44. The water appropriations will be subject to the DNR Water Appropriation Animal Feedlots and Livestock Operations Individual Permit (DNR Water Appropriations Permit). The DNR reviews the permit application upon approval of the MPCA Feedlot permit, which determines final animal numbers and, hence, water consumption. The purpose of the DNR permit program is to ensure water resources are managed so that adequate supply is provided to long-range seasonal requirements for domestic, agricultural, fish and wildlife, recreational, power, navigational, and quality control.
45. The DNR permit program balances competing management objectives, including both the development and protection of water resources. Minn. Stat. § 103G.261 establishes domestic water use as the highest priority of the State's water when supplies are limited. If a well interference arises, the DNR has a standard procedure for investigating the matter. If a commercial operator is found to be causing the problem, the operator must correct it.

46. With respect to the reversibility of water appropriation impacts that are reasonably expected to occur from this proposed Project, the MPCA makes the findings set forth below.
47. The prevention of adverse effects on water appropriation due to increased usage of water by livestock is addressed in the DNR Water Appropriations Permit. Significant adverse impacts to water quantity are not expected; however, if well interference occurs, the operation and management of the feedlot can be modified, and impacts to waters could be reversed. Therefore, the water appropriation impacts that are reasonably expected to occur from the proposed Project are found to be reversible.
48. The MPCA finds that information presented in the EAW and other information in the environmental review record is adequate to assess potential impacts to the quantity of surface and groundwater that are reasonably expected to occur from the proposed Project.
49. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of impacts related to water appropriation that are reasonably expected to occur.

Cumulative Potential Effects

50. The second criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is the “cumulative potential effects.” In making this determination, the MPCA must consider “whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effects; and the efforts of the proposer to minimize the contributions from the project” (Minn. R. 4410.1700 subp.7.B). The MPCA findings with respect to this criterion are set forth below.
51. The EAW, public comments, and MPCA follow-up evaluation did not disclose any related or anticipated future projects that may interact with this Project in such a way as to result in significant cumulative potential environmental effects.
52. The EAW addressed the following areas for cumulative potential effects for the proposed Project.
 - Air quality;
 - Water quality of surface waters; and
 - Water quality of groundwater.

Air Quality

53. Cumulative potential effects on air quality were evaluated by comparing the Minnesota ambient air quality standards for hydrogen sulfide, iHRVs for ammonia, and odor intensity thresholds with concentrations in the air predicted by air modeling (see Findings 17–24). The modeling analysis included the estimated emissions from the proposed Project, eight nearby feedlots, and incorporated conservative background concentrations to account for the potential impacts of air emissions from other feedlots. Air concentrations were estimated for these pollutants at the

35 residences located in the three-mile by three-mile area surrounding the proposed Project. All modeled concentrations were below the health-based and nuisance odor criteria used in the analyses and no violations of air quality standards were predicted. Therefore, the cumulative potential effects on air quality are not believed to be significant in the Project area, and the proposed Project is not expected to contribute significantly to adverse cumulative potential effects on air quality.

Water Quality of Surface Waters

54. The proposed feedlot expansion and manure application sites are located in the Dismal Creek, Long Prairie River, and Crooked Lake Ditch Minor Watersheds. Row crop agriculture is the primary land use within the three watersheds, with some forage production and woodlands as well. Several livestock farms are currently present within the watersheds. According to the MPCA's 2012 report on Impaired Waters, the Long Prairie River is impaired for fish bioassessments and dissolved oxygen. These impairments affect aquatic life. Crooked Lake Ditch is impaired for aquatic macroinvertebrate bioassessments. This impairment affects aquatic life. Lake Osakis is impaired for nutrient/eutrophication and biological indicators. This impairment affects Aquatic Recreation. Dismal Creek is not listed for any impairments.
55. A Total Maximum Daily Load (TMDL) Implementation Plan has been prepared for the Long Prairie River dissolved oxygen impairment. The Long Prairie River TMDL project indicates low dissolved oxygen due to high levels of ammonia impairs water quality in the Long Prairie River. Low dissolved oxygen occurs primarily during low-flow conditions when the volume and current of the water in the river are less than average. Modeling results from the TMDL study indicate that, with ammonia reductions, it is possible to meet the dissolved oxygen standard in the Long Prairie River during low flow conditions. The TMDL report was approved by the U.S. Environmental Protection Agency on August 5, 2005. The TMDL Implementation Plan can be found at: <http://www.pca.state.mn.us/index.php/view-document.html?gid=7986>.
56. The Manure Management Plan (MMP), dated February 1, 2012, is consistent with the recommended BMPs for the Long Prairie River TMDL Implementation Plan.
57. As noted in previous findings, the Project is required by the NPDES/SDS Permit to meet a "no discharge" standard. All livestock will be housed in a total confinement building and manure will be stored in beneath barn concrete pits that have been designed by a Professional Engineer and approved by the MPCA.

Water Quality of Groundwater

58. A review of wells recorded in the Minnesota Department of Health County Well Index for Section 8, Leslie Township, Todd County, and the surrounding sections show a significant clay layer near the surface in the area of the Project. There were eight wells documented in the nine sections reviewed. For two of the wells in the area, the clay does not start until a depth of 50-55 feet. At the remaining six wells, the clay layer starts from 0-2 foot depth. The thickness of the clay layer, as recorded on the well logs, ranges from 20 feet to 152 feet. Clay soil, which is made up of fine

materials, can hold a lot of water yet transmits very little because water and other materials cannot move easily through the tiny pore spaces. Therefore, a clayey soil layer in the ground is going to slow/limit the rate and amount of material/liquids that can get down into groundwater.

59. To protect groundwater, the Project Proposer is required to follow the design criteria in Minn. R. ch. 7020 for the construction of the manure storage structures for the swine manure and the land application of the manure. The proposed plans and specifications for the manure storage pits, the design and operation of the open lots, and the MMP for Manure Transfer for the land application of the manure have been reviewed and approved by MPCA staff, and will be enforceable conditions of the Project's NPDES/SDS Feedlot Permit.
60. The producer is required to follow an MPCA approved MMP for Manure Transfer and submit an annual report to the MPCA on manure production, land application and any discharges. The approved MMP for Manure Transfer is an enforceable part the Project's NPDES/SDS Permit. The proposed Project is not expected to adversely impact groundwater from land application of manure.
61. The MMP for Manure Transfer requires that all manure testing information, as well as State requirements for limiting the application rates of the manure, be supplied to all manure recipients. Manure recipients are required to apply manure according to State law, at agronomic rates that do not apply more nitrogen than the crop can uptake. In addition, the use of the Nitrapyrin will reduce the potential for nitrate leaching by delaying the conversion of nitrogen to nitrate, thus, allowing the conversion to occur more closely to peak crop demand for nitrate-N. Lastly, manure applications done in the fall will be done when soil temperatures are below 50°F, which will further limit the conversion of applied nitrogen to nitrate-N.
62. The MPCA report "Effects of Liquid Manure Storage Systems on Ground Water Quality" (April 2001) summarizes results from ground water monitoring conducted to determine possible impacts from different types of manure storage. Results of monitoring around concrete structures show that, even at vulnerable sites, migration of contaminants beyond 100 feet is unusual. The manure storage structures proposed will be concrete, will not be open to the environment, and are designed specifically to prevent contamination of groundwater.
63. Based on information on the proposed Project obtained from air modeling, permit application and plan review processes, ongoing water quality assessments, a site visit, and presented in the EAW, the MPCA does not expect significant cumulative potential effects from this Project.

The Extent to Which the Environmental Effects Are Subject to Mitigation by Ongoing Public Regulatory Authority

64. The third criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project" (Minn. R. 4410.1700, subp. 7.C). The MPCA findings with respect to this criterion are set forth below.

65. The following permits or approvals will be required for the Project:

Unit of Government	Permit or Approval Required
MPCA	General NPDES/SDS Livestock Production, Construction, Operation (Feedlot) and Stormwater Permit
Todd County	Conditional Use Permit
DNR	Water Appropriation (Animal Feedlot and Livestock Operations General Permit)

66. MPCA NPDES/SDS Livestock Production, Construction, Operation (Feedlot) and Stormwater Permit. An NPDES/SDS Feedlot and Stormwater Permit are required for the Project. The NPDES/SDS Feedlot Permit incorporates construction and operation requirements, and includes operating plans that address manure management, emergency response protocols, and odor/air quality management. The attachments are an enforceable condition of the NPDES/SDS Permit. Permitted facilities are inspected by both State and County feedlot staff. Failure to comply with the terms and conditions of the permit will result in enforcement and possible fines.
67. County Conditional Use Permit. As a conditional use, the Project will have to obtain a Conditional Use Permit (CUP) from Todd County. Section 5.05, Part C of the Todd County Zoning Ordinance states, "In permitting a new conditional use or the alteration of an existing conditional use, the Planning Commission may recommend the imposition, in addition to the standards and requirements expressly specified by this Ordinance, of additional conditions which the board considers necessary to protect the best interest of the surrounding area or the county as a whole." Todd County will determine whether the proposed Project meets the criteria of a conditional use consistent with the Todd County Land Use Ordinance. The information developed as part of this environmental review process has been available to Todd County to aid in determining whether to issue the CUP. The county may impose further conditions, if desired.
68. DNR Water Appropriation Permit. An individual DNR Water Appropriation Permit will be required for the Project, as the Project Proposer will be withdrawing an estimated 6.62 million gallons per year. A new well will be drilled for the Project. The purpose of the DNR permit program is to ensure water resources are managed so that adequate supply is provided to long-range seasonal requirements for domestic, agricultural, fish and wildlife, recreational, power, navigational, and quality control. The permit program balances competing management objectives, including both the development and protection of water resources. Minn. Stat. § 103G.261 establishes domestic water use as the highest priority of the State's water when supplies are limited.
69. The above-listed permits include general and specific requirements for mitigation of environmental effects of the Project. The MPCA finds that the environmental effects of the Project are subject to mitigation by ongoing public regulatory authority.

The Extent to Which Environmental Effects can be Anticipated and Controlled as a Result of Other Available Environmental Studies Undertaken by Public Agencies or the Project Proposer, Including Other EISs

70. The fourth criterion that the MPCA must consider is “the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the Project Proposer, including other EISs” (Minn. R. 4410.1700, subp. 7. D). The MPCA findings with respect to this criterion are set forth below.
71. The following documents were reviewed by MPCA staff as part of the environmental impact analysis for the proposed Project:
- Data presented in the EAW;
 - Permit application; and
 - Air dispersion modeling report.
72. This list is not intended to be exhaustive. The MPCA also relies on information provided by the Project Proposer, persons commenting on the EAW, staff experience, and other available information obtained by staff.
73. The environmental effects of the Project have been addressed by the design and permit development processes, and by ensuring conformance with regional and local plans. There are no elements of the proposed Project that pose the potential for significant environmental effects.
74. Based on the environmental review, previous environmental studies by public agencies or the Project Proposer, and staff expertise and experience on similar projects, the MPCA finds that the environmental effects of the Project that are reasonably expected to occur can be anticipated and controlled.
75. The MPCA adopts the rationale stated in the attached Response to Comments (Appendix B) as the basis for response to any issues not specifically addressed in these Findings.

CONCLUSIONS OF LAW

76. The MPCA has jurisdiction in determining the need for an EIS for this proposed Project. The EAW, the permit development process, and the evidence in the record are adequate to support a reasoned decision regarding the potential significant environmental effects that are reasonably expected to occur from this proposed Project.
77. Areas where the potential for significant environmental effects may have existed have been identified and appropriate mitigation measures have been incorporated into the proposed Project design and permits. The proposed Project is expected to comply with all MPCA standards.
78. Based on a comparison of the impacts that are reasonably expected to occur from the proposed Project with the criteria established in Minn. R. 4410.1700, subp. 7, the proposed Project does not have the potential for significant environmental effects.

79. An EIS is not required.

80. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

ORDER

The Minnesota Pollution Control Agency determines that there are no potential significant environmental effects reasonably expected to occur from the Gourley Brothers Hog Feedlot Project and that there is no need for an Environmental Impact Statement.

IT IS SO ORDERED

Commissioner John Linc Stine
Chair, Citizens' Board
Minnesota Pollution Control Agency

Date

Appendix A

Minnesota Pollution Control Agency

**Gourley Brothers Hog Feedlot
Environmental Assessment Worksheet**

LIST OF COMMENT LETTERS RECEIVED

1. Aimee Goodwin, Carlos, Minnesota. Letter received August 2, 2012.
2. Patrick R. Kennedy, Grey Eagle, Minnesota. E-mail sent August 18, 2012.
3. Sharon L. Kutter, Grey Eagle, Minnesota. E-mail sent August 19, 2012.
4. Deborah J. Dowell, Osakis, Minnesota. Letter sent August 20, 2012.
5. Wallace and Beverly Morgan, Leslie Township. E-mail sent August 20, 2012.
6. Kristen Krieger, Leslie Township. E-mail sent August 20, 2012.
7. Dorothy Snyder, Carlos, Minnesota (and representing 10 additional commenters). Letter received August 20, 2012.
8. Kathern Edenloff, Osakis, Minnesota. E-mail sent August 22, 2012.
9. Marilyn A. Gibson, Long Prairie, Minnesota. Letter received August 22, 2012.
10. Travis Winter, Long Prairie, Minnesota. Letter received August 21, 2012.
11. Melissa Doperalski, Minnesota Department of Natural Resources. E-mail sent August 22, 2012.
12. Jan and Ron Schmid, Long Prairie, Minnesota. E-mail sent August 22, 2012.

/

To whom it may concern

My name is Aimee Goodwin. I am writing to address the issue of the swine barn that is going in down the road from my home. Of course I have a personal interest in this. When I first heard about it I was mostly heart broken at what this meant for our wonderful country neighborhood. It's a beautiful part of Todd County where the people are friendly and the wildlife is plenty. One of my favorite things to do is sit out on my front porch in the spring and listen to the chores of the frogs that reside in silver crick just over the hill from my home. Heart ach turned to a sick stomach at the thought of what the smell of two thousand plus pigs would do to that beautiful night.

If I could stop it, I would, and I'd be a liar if I told you I haven't tried. My interest is personal of course. But this is not an issue that should just be the problem of those who live near by. This is an issue for the entire surrounding area. Any one who loves nature any one who cares about our environment. This facility is going to be built at the top of the valley where we live and though there is no water running on the actual property, the long prairie river runs adjacent to it just a short three miles away. Silver crick is less then a mile.

I have done a lot of research on theses massive operations. I could fill this entire news paper with the horror stories I have come across in my studies. But what I want to focus on today is what this may do or has the potential to do to our environment. There is the song and dance of " there are very strict state laws and restrictions for these operations to make sure that they are safe for everyone." And that's true there are. But when it comes right down to it, no one can guarantee any of that. The real bottom line is, that these massive hog barn operations are filthy and have even been referred to as one of the worst environmental pollutants that there is.

So here is the short version of this situation. Any polluted water, will run right down our valley. It will easily travel across our neighbor's property onto ours and only have a short trip from here into the crick. From there, with nothing to stop it, it will be dumped into the long prairie river and go any where it sees fit to travel along it way. That's not all. Because one pig makes approximately three gallons of manure a day, The owners needs to have contracted with the surrounding land owners an agreement to be able to spread the manure. Over time and being so close to the water it is possible for

the ground to become oversaturated and the water can be polluted that way.

The threat to the water system and our environment is real. IT IS REAL! And, as I said before this should be a concern for everyone we are all affected.

We live in a wonderful country where men are free to chose there work and live the dream and God bless it! My intention is not to hinder some one from making an honest living. However, I have my own dreams to protect. Making sure that my family is safe and the environment that they live in is not a danger to them is on the top of my list.

11982 County Rd 65

Carlos, MN 56319

Kain, Kevin (MPCA)

From: Pat Kennedy [pkennedy@meltel.net]
Sent: Saturday, August 18, 2012 8:52 AM
To: Kain, Kevin (MPCA)
Subject: Gourley Bros.

2

Mr Kain

Kevin, I am writing regards the proposed Gourley Bros. hog production facility in Leslie township of Todd Co. I hope that you will see fit to at least require an Environmental Impact Statement for this facility. Todd co. is already home to several large facilities which degrade our way of life, especially our clean air and water resources. There are progressive people here who would like to attract industries based on tourism and enjoyment of the outdoors as we have such resources here at the present time. Large hog facilities negatively affect neighboring property owners and the quality of life in our communities in general, it is time to begin regulating them much more stridently and I feel it needs to begin in Todd Co.

Sincerely, Patrick R. Kennedy
18317 Co. Rd. 59 Grey Eagle (Todd Co.) Mn.56336

Kain, Kevin (MPCA)

From: Sherry Kutter [skutter@meltel.net]
Sent: Sunday, August 19, 2012 1:57 PM
To: Kain, Kevin (MPCA)
Subject: Deny Todd County / Gourley Bros Feedlot

3

Re: Gourley Brothers EAW Swine Facility / Todd County

Mr Kain, please reply that you have received this email. Thank you.

I am writing in regard to the EAW for the proposed Gourley Brothers swine facility in Todd County, about 11 miles west of Long Prairie which will house almost 4000 animals. Please deny this request based on the the following information as well as the significant documentation available of the great detriment these facilities bring to the communities.

The benefits of large factory swine lots are that it can be incredibly lucrative for the owners while the community, health, environment and taxpayers suffer and must pay the consequences. If this is approved, who will pay for the negative health effects, loss of property value and pollution of land and water? In the past, communities have been the unlucky recipients of any expense. This is wrong. In your decision-making and response to the public please address all of these issues and explain how the community will not be at all affected by this project.

FACTS:

A citizen's test in Renville Co., Minnesota found that one-quarter of 32 tests taken near several manure lagoons from factory-scale hot lots exceeded Minnesota air quality standards for hydrogen sulfide. This poisonous gas, usually associated with a "rotten egg" smell, has caused symptoms such as nausea, headaches, blackout periods and vomiting. (Land Stewardship Project, Minnesota.) Odors can be nearly as intense four miles downwind as they are at the site. Several swine infections can be transmitted to humans, some with potentially serious outcomes including streptococcus suis meningitis, swine influenza, scabies, ringworm and salmonellosis.

Numerous types of organic and inorganic dust and gases are present inside swine confinement buildings. Additionally, microorganisms, toxins carbon monoxide, carbon dioxide, methane, ammonia, and hydrogen sulfide are present. These can serve as either an irritant or occasionally an allergen. Symptoms from exposure include cough, nasal irritation, eye irritation, chest tightness and headaches.

Numerous gases are also generated in confinement facilities. Gases can irritate the airways causing similar symptoms as noted above. Additionally, gases may displace oxygen causing an oxygen depleted atmosphere which results in asphyxiation. Certain gases such as hydrogen sulfide may also interfere with oxygen utilization by cells causing a cessation of aerobic respiration leading to cell death. Methane may also be an explosion hazard.

Unlike other industry, factory farms are not subject to OSHA regulations which would otherwise protect workers from the dusts, gases and toxins that are present in factory farms and hazardous to health.

Odors from factory farms that invade homes, sicken families and chase away visitors also destroy property values. What kind of assurance can you offer that neighbors will not be stuck with property that has lost its value?

The large-scale indiscriminate use of antibiotics in animals invariably leads to antibiotic resistance in bacteria that cause disease in humans, says the U.S. Center for Disease Control. This is because hogs and people use similar-type antibiotics. Also, the use of antibiotics for weeks at a time for non-therapeutic reasons like growth promotion can exacerbate the situation, writes Dr. Stuart Levy of the Tufts Medical School.

A hog excretes nearly 3 gallons of waste a day, or 2.5 times as much as a human. A farm with thousands of hogs on it will easily produce more waste every day than many small communities that must have waste treatment facilities. Factory farms are, however, under no obligation to treat their city-size wastes other than to spread it over farmland. Studies of typical application rates show plant life cannot absorb the amount of nutrients the factories expel.

If a confinement feedlot goes out of business taxpayers can be left with the cleanup which, in other locations has been in the millions of dollars.

The manure slurry of factory farms is full of heavy metals like copper, nickel and manganese because the animals do not digest all that is in their feed as growth supplements. Spreading large amounts of these metals regularly over fields is dangerous. Experts say that once there's a toxicity, you can't remove it and plants won't grow there. The soil damage is permanent. Runoff from the fields also flushes the metals, along with excessive nitrogen and phosphorus from the manure, into waterways and public drinking supply watersheds leading to fishkills and illness for consumers and swimmers.

This information is not new. These factory-scale hog operations have been outlawed in many places because the cost to communities is so great. Not even the farm owner has enough money to clean up the mess.

History has taught us that societies, both human and animal, do not survive when they pollute their own habitat.

Does the MPCA really have the needed staff to effectively monitor these operations? Evidence shows that they do not.

Based on the information provided here and also what has now become general knowledge – that these factory-scale feedlots are disastrous to community, health, environment and thus, the taxpayer – deny the application from Gourley Brothers (from Iowa) in Todd County.

Thank you.

Sharon L Kutter

10917 County 47

Grey Eagle MN 56336

Todd County MN

Dear Mr. Kain:

I am writing to let you know that I do **NOT** want this proposed huge hog farm to be allowed in Leslie Township, Todd County, Minnesota.

I was born and raised in Leslie Township, which has many small farming operations even today. We don't want this huge hog farm operation to be allowed! It will pollute a pond that runs into a creek that empties into the Long Prairie River! It will pollute the ground water of neighbors! The smell will force anyone who lives close to the area to vacate their homes, and it will also decrease the value of their homes because of the stench!

This is like sending a Wal-Mart into a rural area, to run the smaller hog farms out of business!

Please, please, please stop this fiasco from happening! I beg you! Leave Leslie Township alone! If this huge hog operation needs to go forward, let it go in somewhere else! Put it up in northern Minnesota where there aren't as many people living!

Deborah J. Dowell
13574 Falcon Drive
Osakis, MN 56360-4784

320-732-7166

Kain, Kevin (MPCA)

From: Deb Dowell [djdowel@centurylink.net]
Sent: Monday, August 20, 2012 1:16 PM
To: Kain, Kevin (MPCA)
Subject: Proposed hog farm in Leslie Township

Dear Mr. Kain:

I am writing to let you know that I do **NOT** want this proposed huge hog farm to be allowed in Leslie Township, Todd County, Minnesota.

I was born and raised in Leslie Township, which has many small farming operations even today. We don't want this huge hog farm operation to be allowed! It will pollute a pond that runs into a creek that empties into the Long Prairie River! It will pollute the ground water of neighbors! The smell will force anyone who lives close to the area to vacate their homes, and it will also decrease the value of their homes because of the stench!

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Deborah J. Dowell
13574 Falcon Drive
Osakis, MN 56360-4784
320-732-7166

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5

Kain, Kevin (MPCA)

From: Wallace Morgan [wkmorganjr@hotmail.com]
Sent: Monday, August 20, 2012 4:33 PM
To: Kain, Kevin (MPCA)
Subject: swine

I don't think it's right you only give the public one week to response and when most people are on vacation. First if having 3,000 pigs in one place is legal, it shouldn't be. Todd County already has enough animal enterprises polluting it, we don't need anymore. If you must have that many pigs in one place take some place where there are very few people. I don't care what improvements you have made to large pig farms, they are still going to lower the value of the rest of the area. My ancestors settled in Leslie township in 1904, I don't want anyone spoiling it. I say Stay Away.
Wallace & Beverly Morgan

Kain, Kevin (MPCA)

From: Chuck Krieger [cdkspaz@arvig.net]
Sent: Monday, August 20, 2012 8:17 PM
To: Kain, Kevin (MPCA)
Subject: Please reconsider

Dear Mr. Kain,

I live in Leslie Township, in Osakis, Minnesota. I am deeply disturbed by the prospect of a large hog operation starting up in my neighborhood. It is hard enough to make a living here without having a large operation such as this coming in and running the small, local farm operations out of business.

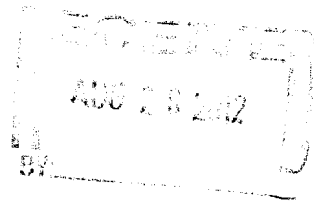
What will the environmental impact be? What about the Long Prairie river? What about the quality of the fresh air that will be compromised?

Do you stand to gain financially on this hog operation? Do you live anywhere near where this facility will be? The tax dollars that could be generated for Leslie Township from this operation are not worth what it will cost all of the local people who live out here or what it will cost the environment. Please don't ruin the lives of all of us "little people" who live in this area.

Sincerely,
Kristen Krieger

August 15, 2012

Kevin Kain
MPCA
520 Lafayette Rd N
Saint Paul, MN 55155-4194



7

Re: Proposed Gourley Brothers Swine Facility in Todd County, Minnesota

Dear Sir,

Thank you for the opportunity to submit comments regarding the Gourley Brothers EAW regarding the proposed swine facility in Todd County, 11 miles west of Long Prairie.

As land owners and neighbors within approximately 1 ½ miles of the proposed facility, after reviewing the EAW, we have concerns that we feel should be further addressed.

Most of the concerns we have relate to the environmental impact of this proposed swine facility. One of us is on 24-hour oxygen due to a lung disease, another family consists of a mother and children with asthma, some of us own wetland bordering Dismal Creek which empties into the Long Prairie River, and most of us live on roads with potential increased truck traffic. County Rd 1 is paved, but County Rd 65 is gravel (this is in error in the EAW 9. Traffic and Public Infrastructure Impacts A.).

Our concerns regarding the annual fall distribution of 5.0 million gallons of liquid manure include the statement that most of the time it will only happen once a year, but "Depending on the year and production cycle, some spring applications of manure will occur to maintain adequate storage at the facility" (EAW 5. Manure Management B. & D.). With the potential odor/air quality at the time of agitation, pump out and distribution, the fact that no notice will be given to us as neighbors is also disconcerting (EAW 6. Air and odor emissions D.).

We're also concerned about the location of some of the manure application sites being in close proximity to the Long Prairie River and Dismal Creek (Section 4, 525 feet; Section 19, 350 feet; Section 21, 250 feet).

We understand that change in our country surroundings is inevitable, but we desire to be the best stewards of our land, air and water resources as we can.

Due to our concerns regarding our home environment, we request an Environmental Impact Statement (EIS) before approval is granted for the construction of this Gourley Brothers Swine Facility.

Respectfully,

Neighbors and Land Owners
near the site of the proposed facility

Your response is appreciated.
Thank You

Contact person:
Dorothy Snyder dordan@midwestinfo.net

We, as neighbors of the proposed Gourley Bros. Swine Facility, request that an Environmental Impact Statement (EIS) be completed before granting approval for this facility.

Name:

^{Carey's}
Aimee Goodwin

Signature:

Aimee Goodwin

Address:

11982 Cty Rd 65 NE
Carlos MN 56319

Date:

8-16-12

Name:

Laura Winter

Signature:

Laura Winter

Address:

25108 Cty 1 Long Prairie MN

Date:

8-16-12

Name:

Russell Anderson

Signature:

Russell Anderson

Address:

12142 County Rd 65

Date:

8-16-12

Name:

^{Steve &}
Eileen Goodwin

Signature:

Eileen Goodwin

Address:

31208 Cty 71 Eagle Bend, MN
56446

Date:

8-16-12

Name:

Joel Walsh

Signature:

Joel Walsh

Address:

25695 Co Rd 1, Carlos

Date:

8-16-12

Name:

Mark Tuetner

Signature:

Mark Tuetner

Address:

6236 E Lake Carlos

Date:

8/17/12

Name:

Travis Winter

Signature:

T Winter

Address:

25108 County Road 1 Long
Prairie

Date:

8/16/12

Name:

Signature:

Address:

Date:

We, as neighbors of the proposed Gourley Bros. Swine Facility, request that an Environmental Impact Statement (EIS) be completed before granting approval for this facility.

Name: Daniel Snyder
 Signature: *Daniel Snyder*
 Address: 25438 - 113th Ave Carlos
 Date: 8-15-12

Name: Dorothy Snyder
 Signature: *Dorothy Snyder*
 Address: 25438 - 113th Ave Carlos
 Date: 8-15-12

Name: Joe + Iona Wolbeck
 Signature: *Joe Wolbeck*
Iona Wolbeck
 Address: 11624 County Rd 65 Carlos
 Date: 8/15/12

Name: Judy Stueve
 Signature: *Judy Stueve*
 Address: 26148 - 113th Ave Carlos, MN 56319
 Date: 8-15-2012

Name: _____
 Signature: _____
 Address: _____
 Date: _____

Name: _____
 Signature: _____
 Address: _____
 Date: _____

Kain, Kevin (MPCA)

From: Fred and Kathy [fredkat@midwestinfo.net]
Sent: Wednesday, August 22, 2012 10:31 AM
To: Kain, Kevin (MPCA)
Subject: Hog Farm Pollution Leslie Township

8

Mr. Kain State of MN

I am writing to express opposition to the expansion of the Hog Farming happening in Leslie Township. It sounds stupid to allow this kind of pollution when the MPCA is working to clean up septic systems. I know you might think they are two different situations, but pollution is pollution and it doesn't make any difference where it comes from. Hog manure is probably one of the worst of the kind. Don't you think the smell will carry across the Osakis Lake, effect the Long Prairie River. Many dollars are spent to clean up lakes and streams, yet this is something that could be approved.

Personally our ground drinking water is infected with pesticides enough, now you want to allow Hog Crap. Liquid manure is terrible smelling and stays in the air for days after being spread. There is lots of money being spent to put the small farms out of business and effecting small towns.

What ever happened to the clean air act? Didn't lots of tax dollars get spent on that? It's ok to smell these awful smells, but people shouldn't burn papers or boxes.

This is unreal.

Kathern Edenloff
12605 170th st.
Osakis, MN 56360
320-859-4684

RECEIVED
AUG 22 2012

9

BY:-----

Aug. 22, 2012

Dear Sir,

My response to the Permit and application of the Gourley Bros. EAW for a commercial multi-Hog farm in West Todd Co is greatly denied by me because of the pollution to the Long Prairie Watershed.

My family farmed, taught and lived on the lands. I swam in the river, friends baptized in the river, we fish in the river and rode the fast and sometimes slow current.

Maybe they could put it in South Dakota, it's closer to Iowa corn. More publicized studies on the pollution should be taken with voters participation.

This is very serious to our land and needs careful decisions.

Thank you.

Sincerely,

Marilyn G. Gibson
310 Central Ave #104
Long Prairie, Mn 56347

ENTERED

10

AUG 21 2012

To: Kevin Kain

Re: Gourley Brothers Hog Feedlot

My name is Travis Winter. I live at 25108 County Road 1 in Leslie Township Sect 9, south east of the proposed hog feedlot. I am writing this to let you know that I believe an Environmental Impact Statement should be completed. If I am looking at the measurements correctly, my residence is approximately 1713 feet away from where the facility would be built. In this letter, I will address a few of my concerns regarding the potential effects of a large facility like this could impact the environment and our neighborhood.

One of my concerns is regarding three of the areas of land that are possibly going to be used to inject the manure. These areas are in Leslie Township, section 9, to the north of my property, and on the east side of my property. The other piece is on the north side of County Road 65 and east of County Road 1. These pieces of property are owned by Ed Wiegert. A couple of years ago, Ed had these three fields tiled to help with water drainage. In the spring, the 10 acres he has tiled on the north side of my property, shares the same ditch as my land. A lot of water that runs through his tile off of these fields runs down into the ditch and the water flows under County Road 1 to the west. Then the water eventually runs into Dismal Creek and then into the Long Prairie River. I understand that the purpose of injecting the manure is to prevent runoff, but if these fields are tiled, I would be led to believe the manure could seep through the dirt and run into the tile and go right into the ditch.

Another concern is the type of soil that the manure is going to be injected into. In the paperwork it says that the land is sandy loam and muck. When I bought this place, I had to put a new septic system in. I had to get a mound system because under the black dirt was clay. What type of soil is under these three fields? If clay is underneath these fields, so close to my property, could this lead to the manure running off these fields into the creek and the river?

Another concern would be the possibility of the below ground concrete manure storage area having a defect. I believe that the engineering behind it will be thorough, but nothing is 100% guaranteed. With the creek and river being so close to this facility, what is Gourley Brother's plan if there were to be an accident in which the walls would break? Five million gallons of manure would be a lot to contain in event of a blow out in the walls of the manure storage area or the pipe they use to pump the manure to the projected injection sites.

I have many questions and concerns regarding this facility. The most obvious concern of mine would be the odor. How can they possibly contain or control the odor. Like I mentioned before, I am 1713 feet southeast of this facility. I believe that they will be able to use a filtration system at the barn, but it will be impossible to keep the northwest wind from making the odor of 5 million gallons of manure come directly at my house. Also,

they have projected to build a 29,000 gallon storm water retention pond and a 72'x60' compost bay. How will the company be able to contain these odors? Will there be a filtration system on these two things? I am concerned about the odor creating more allergens, more than I already take prescriptions for now. I have read many reports of health effects caused by these large containment farms as well, and this is an obvious concern of mine.

I enjoy being outside. I believe that if this facility goes up so close to my house, I will have to stay inside for most of the time to keep away from the smell. I love living in the country and know that the smell of manure from the local farmers living off the land is going to happen, but I don't have to smell their manure every day. I am also not against people making an honest living. I feel that Gourley Brother's could have found a better location, not so close to my neighbors and me. This building site seems so close to five residences and so close to the Dismal Creek and Long Prairie River. They never even approached me or some of the other small acre property owners. They only went to the local farmers that had the acres they would need to help make their facility operate to spread the manure on.

Why are the hog farmers from Iowa buying land in Minnesota and moving their operations up here? Is the Minnesota PCA doing a study or has your office conducted an investigation to see if Gourley Brother's has been in compliance with the rules and regulations at their other facilities in Minnesota and Iowa?

As I stated before, I am not opposed to new development in Todd County, but I am concerned about the impact that this facility could have on our area. I feel that the Minnesota Pollution Control Agency should consider the need for an Environmental Impact Statement.

Thank you for your time,

A handwritten signature in black ink, appearing to read 'Travis Winter', with a stylized, cursive script.

Travis Winter
25108 County Road 1
Long Prairie, MN 56347

11

Kain, Kevin (MPCA)

From: Doperalski, Melissa (DNR)
Sent: Wednesday, August 22, 2012 3:30 PM
To: Kain, Kevin (MPCA)
Subject: Re: Gourley Brothers Hog Feedlot EAW - DNR Comments

Mr. Kain,

The Department of Natural Resources (DNR) has reviewed the EAW for the Gourley Brothers Hog Feedlot project located in Leslie Township, Todd County. The DNR has the following comments for your consideration.

The DNR has some concern with the proposed location of the underground storage facility in relation to Dismal Creek and the associated drainage from upland to the creek bottom. Manure is proposed to be stored in concrete pits through slatted floors in the barn. While this will capture the majority of swine manure, there may still be some potential for overland drainage of swine manure to Dismal Creek. The mainstem of the Long Prairie River near Long Prairie has been identified with oxygen depletion issues (Per PCA monitoring). Any additional BOD would likely further degrade the river. The DNR recommends that efforts focus on reducing or eliminating any runoff potential to the creek and later the Long Prairie River through the consideration of additional containment options in the event of large rain events to handle onsite runoff. If this has not been discussed in project planning, the DNR encourages the topic be explored.

With respect to the land application of manure in Items 19 and 21: Sites that are in close proximity to public waters should only have manure application if there is hay or alfalfa crops with more root mass and potential use rather than runoff to these adjacent waters of the state. If the crop cover is not in permanent ground cover (i.e. row crop such as corn and beans), application should be limited to periods when active plant growth offers the opportunity to capture and utilize material more effectively. The DNR encourages any land application of manure to be far enough away from potential drainages to public waters, even in the event of larger than normal rainfall in the proposed areas.

Thank you for the opportunity to review the EAW. Please feel free to contact me with any questions on the above comments.

-Melissa

Melissa Doperalski
Regional Environmental Assessment Ecologist
Department of Natural Resources, Central Region
1200 Warner Road
Saint Paul, Minnesota 55106
651.259.5738
melissa.doperalski@state.mn.us

Kain, Kevin (MPCA)

From: Jane and Ron Schmid [jschmid@rea-alp.com]
Sent: Wednesday, August 22, 2012 4:10 PM
To: Kain, Kevin (MPCA)
Cc: rep.mary.franson@house.mn; sen.bill.ingebrigtsen@senate.mn
Subject: Gourley Brothers EAW (Environmental Assessment Worksheet)

Dear Mr. Kain,

The Long Prairie Leader (August 22, 2012) reported the Minnesota Pollution Control Agency is looking for comments from the public regarding a proposed swine facility just down the road from us. The article indicated that the deadline for submitting comments is tomorrow, August 23rd - leaving little time to spare for sharing our major concerns.

We share our beautiful countryside and stewardship of the land with many neighbors here in Clotho. Picking up litter from the ditches and boating the river to collect both large and small refuse for proper disposal - we care, we all care.

We also have serious concerns for critters that would not see the light of day in complete indoor confinement. The number(s) of animals proposed staggers the imagination: 2,930 sows, 300 nursery pigs and 750 replacement gilts (nearly FOUR THOUSAND animals). FOUR THOUSAND animals producing an extreme amount of waste. Whether the waste is contained or not, ultimately it must be managed - through outdoor application to surface land?! Precipitation will allow surface waste to enter creeks and wetlands - eventually, the Long Prairie River.

Will this be a precedent for more of these types of facilities? We believe more study of the immediate environment must be done to determine the extent of damage to our air quality and both land and water pollution. Not to mention the misery of four thousand swine all in an unnatural indoor shelter. The article says the facility is planned to be 230' x 424' - but it does not indicate how much of that space is proposed for animal containment? A crowd to be sure.

Due to the proximity of this proposed location to wetlands, creeks - and our Long Prairie River; we have to question whether it is at all environmentally sound. Please, please conduct an extensive feasibility study before giving any encouragement to the Gourley Brothers.

Best regards,

Jane and Ron Schmid
PO Box 67
16004 County 38
Long Prairie, MN 56347
320-732-2761

Appendix B

Minnesota Pollution Control Agency

Gourley Brothers Hog Feedlot, Todd County
Environmental Assessment Worksheet (EAW)

RESPONSES TO COMMENTS ON THE EAW

Comments Related to Surface Water Quality

Comment 1: Several comment letters expressed concern that manure and stormwater storage at the Gourley Brothers Hog Feedlot (Project) may be inadequate in periods of high precipitation or otherwise impact the Long Prairie River and Dismal Creek with runoff from the Project. (See comment letters 1, 2, 4, 6, 8, 9, 11, and 12.)

Response:

Manure or manure-contaminated runoff: The design of the proposed Project (must prevent the discharge of manure or manure-contaminated runoff to the Long Prairie River and Dismal Creek. The Project is subject to the terms and conditions of the General National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Livestock Production Permit MNG440000 (Feedlot Permit), which sets effluent limitations for Confined Animal Feeding Operations in Part VI.A. as follows:

A. Effluent Limitations

1. There must be no discharge of manure pollutants into waters of the state from the production area except whenever precipitation events cause an overflow of manure. Pollutants in the overflow may be discharged to waters of the state provided that the conditions in subitems a. - c., below apply:
 - a. The production area for any new source swine, poultry or veal facility is designed, constructed and maintained to be a “no discharge” system;
 - b. The production area for any facility not identified by item a., above is designed, constructed, and maintained to contain all Manure, including the runoff and the direct precipitation from a 25-year, 24-hour storm; and,
 - c. The production area is:
 - 1) Operated in accordance with Part III. (Facility Construction, Operation, and Maintenance) of this Permit; and
 - 2) The recordkeeping requirements of Part V. are met.

To be in compliance with the effluent limitations cited above, the proposed Project must comply with criteria of the permit and must collect and contain all animal manure as defined in Minn. R. 7020.0300, subp. 4 and all manure-contaminated runoff as defined in Minn. R. 7020.0300, subp. 13b. The Project complies with subitem a. above. The Project, as proposed, will not have any open lots or feed storage areas; therefore, there will be no manure contaminated runoff from the site. The facility will store all animal manure generated in two places: beneath the barn in a 12-foot deep poured concrete pit, and in the mortality composting structure. The poured concrete pit is a liquid manure storage area (LMSA) and, per Minn. R. 7020.2100, subp. 3.A, must provide a minimum of nine months of manure storage, as this proposal does.

The Project complies with subitem b. above, because the facility is designed to prevent all precipitation at the site from contacting manure. Both manure storage structures are covered and will receive no precipitation or generate any manure-contaminated runoff. The mortality compost shed will be constructed on an impervious surface (e.g., a concrete pad or compacted clay) and be constructed to prevent stormwater from coming into contact with the compost. In addition, the proposed mortality compost shed will have a roof to keep direct precipitation from coming in contact with the compost piles.

The Project complies with subitem c. above. The facility will be inspected on a regular basis by both Todd County and State feedlot inspectors during construction and operation of the Project. In addition, the Project is subject to enforcement and potential penalties for failure to comply with Parts III and V of the Feedlot Permit. The proposed Project meets the “no discharge” standard in the Feedlot Permit. As designed, the Project is not expected to have any discharge of manure or manure-contaminated runoff based on runoff and direct precipitation from a 25-year, 24-hour storm event (approximately 4.5 inches of rainfall).

Stormwater Runoff: Stormwater runoff from the proposed Project will be addressed in the Stormwater, Soil Erosion, and Sediment Control Requirements for Livestock and Poultry NPDES/SDS Permits, Appendix C, in accordance with 40 CFR § 122.26. This section of the Feedlot Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP), which includes both temporary and permanent runoff control practices and a stormwater retention basin. Because the proposed location of the Project is currently being utilized as cropland, the area has minimal runoff controls; therefore, the quality of runoff from the site may tend to improve after the project has been constructed due to improved stormwater runoff control at the site.

Land Application of Manure: MPCA staff reviewed the proposed Project’s manure application sites located in the Dismal Creek, Long Prairie River, Crooked Lake Ditch, and Lake Osakis watersheds. Dismal Creek is a tributary of the Long Prairie River. Crooked Lake Ditch flows to Lake Osakis, which in turn outlets to the Long Prairie River by way of an unnamed creek. Currently, row crop agriculture is the primary land use within these four watersheds, with some forage production and woodlands as well. All proposed land application sites are currently being utilized for row crop agriculture. The manure applied to these fields will be applied in place of commercial fertilizers and will not result in an increase in nitrogen or phosphorus loading within the watersheds. All manure will be knife injected at the time of application, minimizing the potential for runoff of manure. The Project is also subject to the Todd County Feedlot Ordinance required setbacks for land application of manure from sensitive features including lakes, streams, intermittent streams, protected wetlands, and open tile intakes to help minimize impacts to surface waters due to land application of manure.

Surface Water Quality Impacts: Surface waters are assessed to determine the potential for cumulative impacts, including the determination of the presence of impaired waters, the Total Maximum Daily Load (TMDL) for relevant pollutants or stressors causing the impairment(s), and the development of a TMDL Implementation Plan to identify the requirements and practices needed to improve the quality of the impaired waters. The status of impaired waters in the project area is addressed in the MPCA’s 2012 Report on Impaired Waters:

- The Long Prairie River is impaired for fish bioassessments and low dissolved oxygen. These impairments affect aquatic life as the stream may not support a thriving community of fish and other aquatic organisms, as indicated by fish population assessments and insufficient dissolved

oxygen. As discussed in more detail below, a TMDL and Implementation Plan is to be developed for the fish bioassessment. A TMDL and Implementation Plan have been developed and approved to address the impairment due to low dissolved oxygen.

- Crooked Lake Ditch is impaired for aquatic macroinvertebrate bioassessments. This impairment affects aquatic life as the stream may not support a thriving community of fish and other aquatic organisms, as indicated by macroinvertebrate population assessments. A TMDL and Implementation Plan are to be developed for this impairment.
- Lake Osakis exhibits impairment related to nutrients/eutrophication and biological indicators. This impairment affects aquatic recreation as the lake may not always be suitable for swimming and wading due to low clarity and algae caused by the presence of excess phosphorus in the water. A TMDL and Implementation Plan are to be developed for this impairment.
- Dismal Creek is not listed for the impairment of any applicable water uses.

The Todd County Soil and Water Conservation District prepared the Long Prairie River Total Maximum Daily Load Non-Point Source Implementation Plan (Implementation Plan), approved by the MPCA in 2006, for the Long Prairie River dissolved oxygen impairment. The Long Prairie River TMDL project, dated August 5, 2005, indicates low dissolved oxygen is present due to high levels of ammonia impairs water quality in the Long Prairie River. Low dissolved oxygen occurs primarily during low-flow conditions when the volume and current of the water in the river are less than average. Modeling results from the TMDL study indicate that, with ammonia reductions, it is possible to meet the dissolved oxygen standard in the Long Prairie River during low flow conditions. The TMDL report was approved by the U.S. Environmental Protection Agency (EPA) on August 5, 2005. The Implementation Plan can be found at: <http://www.pca.state.mn.us/index.php/view-document.html?gid=7986>.

The Implementation Plan lists a number of nitrogen best management practices (BMPs) for Central Minnesota that include:

1. Manage nitrogen applications on soils characterized by high leaching potential;
2. Do not apply fertilizer nitrogen in the fall to coarse-textured (sandy) soils;
3. Comprehensive Nutrient Management Plans;
4. Use of the Nitrogen Loss Assessment Worksheet for commercial fertilizers;
5. Soil testing to take credit for nutrients already in the soil;
6. Proper nutrient crediting of nitrogen for crops in rotation;
7. The use of nitrogen inhibitors to slow the conversion of ammonium to nitrate in the soil;
8. Manure sampling and testing;
9. Sensitive areas identification for proper setbacks;
10. Split nitrogen fertilizer applications on sandy and coarse textured soils;
11. Calibration of manure application equipment;
12. Filter strips and riparian buffers along water courses; and
13. Conservation tillage and no-till for erosion control.

The approved Manure Management Plan (MMP) for the proposed project is consistent with the BMPs listed in the Implementation Plan.

Comment 2: One comment letter discussed the proposed manure storage in concrete pits located under the slatted floors in the barn. The letter expressed concern that there may still be some potential for overland drainage of swine manure to Dismal Creek. (See comment letter 11.)

Response: The potential for overland drainage of swine manure is negligible. The beneath-barn pit is completely covered preventing precipitation from entering the pit. There is some potential for a discharge during the pumping of the pit for land application of manure; however, the facility is required to maintain an Emergency Response Plan. In the event of a spill the producer is required to contain the spill, recover the spill, properly land-apply recovered materials, and notify the state duty officer.

Accidental manure spills at total confinement swine facilities typically happen during the pump-out and land application of manure from the beneath-barn pits. In the event of an accidental spill at the proposed Project, the spill could ultimately flow to Dismal Creek, which is approximately 3,475 feet (measured using ArcView) from the proposed Project. But, to be in compliance with the stormwater provisions of the Feedlot Permit, a stormwater retention basin will be constructed on site to collect and temporarily store all stormwater runoff from the site. This basin would intercept any accidental manure spills at the facility, which would then be removed and immediately land applied.

Comments Related to Groundwater Quality

Comment 3: Two comment letters expressed concern that constructing a large feedlot may degrade groundwater resources. (See comment letters 2 and 4.)

Response: To protect groundwater, the project proposer is required to follow the design criteria in Minn. R. 7020.2100 for the construction of manure storage structures for swine manure. The requirements in Minn. R. 7020.2225 must also be followed for the land application of the manure. These rules specify the minimum construction requirements for manure storage structures and manure management requirements to prevent pollution of waters of the State. Concrete-lined manure storage structures must have water stops or joint sealant materials at all construction joints, and all cracks that may extend through the concrete liner must be sealed with appropriate sealing materials. The floor must be of a thickness of not less than five inches and have steel reinforcing based on American Concrete Institute specifications.

The rule requirements are intended to protect groundwater from both individual and cumulative feedlot impacts. As discussed in the EAW, the original plans and specifications for the manure storage structures and the proposed MMP conform to these requirements. The Feedlot Permit for this Project will require the proposer to adhere to the submitted plans and specifications. Plans and specifications are available for review in the MPCA Brainerd regional office.

In addition, the project proposer is required to notify the state and county feedlot inspectors a minimum of three days prior to the beginning of construction, within three days of completion of construction, and before the backfilling of any vertical concrete-lined walls. Minn. R. 7020.2100, subp. 5.D states, "The owner of the facility shall submit a construction report to the commissioner or county feedlot pollution control officer within 60 days of completion of any new or modified manure storage area. The report must be prepared and signed by the design engineer and must contain an assessment of whether the completed manure storage area conforms to the design plans and specifications submitted to the commissioner or county feedlot pollution control officer. The commissioner may require manure

removal from the manure storage area and corrective actions if the construction report indicates that the completed manure storage area does not conform to the design plans and specifications.”

The MPCA report “Effects of Liquid Manure Storage Systems on Ground Water Quality” (April 2001) summarizes results from groundwater monitoring conducted to determine possible impacts from different types of manure storage. Results of monitoring around concrete structures show that, even at vulnerable sites, migration of contaminants beyond 100 feet is unusual. The manure storage structures proposed will be concrete, will not be open to the environment, and are designed specifically to prevent contamination of groundwater.

Soil is made up of particles of rock and the spaces between these particles. Clay soil, which is made up of fine materials, can hold a lot of water yet transmits very little because water and other materials cannot move easily through the tiny pore spaces. Therefore, a clayey soil layer in the ground is going to slow/limit the rate and amount of material/liquids that can get down into groundwater. A review of wells recorded in the Minnesota Department of Health County Well Index for Section 8, Leslie Township, Todd County and the surrounding sections show a significant clay layer near the surface in the area of the Project. There were eight wells documented in the nine sections reviewed. For two of the wells in the area, the clay does not start until a depth of 50-55 feet. At the remaining six wells, the clay layer starts from 0-2 foot depth. The thickness of the clay layer as recorded on the well logs ranges from 20 feet to 152 feet. The Table below is a summary of the well logs reviewed. Exhibit 1 of this document is a map of the area showing the location of the wells listed in the table.

Unique Well Number	Section	Top of Clay Layer (ft)	Bottom of Clay Layer (ft)	Thickness of Clay Layer (ft)	Well Casing Depth (ft)
406763	4	2	120	118	129
753929	5	52	89	37	97
588475	7	0	152	152	152
565139	8	1	48	47	52
523318	16	55	75	20	97
600388	16	0	83	83	88
605468	17	1	63	62	84
649809	17	1	79	78	85

Comments Related to Land Application of Manure

Comment 4: Three comment letters expressed concern about the Project’s potential to cause water pollution due to the proximity of manure application sites to surface waters. (See comment letters 1, 11, and 12.)

Response: As a condition of the Project’s Feedlot Permit, the project proposer will be required to follow its MPCA-approved MMP, dated February 1, 2012. The MMP requires the project proposer to test its manure annually to ensure that recipients of the manure can determine agronomic land application rates based on crop needs in accordance with Minn. R. 7020.2225, which also requires that all manure recipients have an MMP that regulates the timing, method of application, and amount of manure applied to each field based on proximity to sensitive features, the nutrient content of the manure, the soil fertility levels in the soil, and realistic yield goals for the crop rotation. All rates are based on agronomic needs as determined by current research from the University of Minnesota.

Animal manure is an excellent source of nutrients, including nitrogen, which makes it a desirable alternative to commercial fertilizers. However, the level of nitrate nitrogen in groundwater is a potential health concern for some individuals, particularly pregnant women and infants, if consumed.

Groundwater is a significant source of drinking water in the area. Since nitrate is water-soluble, excess nitrate not used by plants has the potential to leach through the soil and into the groundwater. As stated in the EAW, the project proposers must employ BMPs for nitrogen retention and uptake that meet or exceed those practices required by Minnesota rule. The proposed MMP includes the following BMPs:

- Land application of manure must occur at rates where nutrients do not exceed crop uptake.
- Manure applications should be delayed until soil temperatures are below 50 degrees Fahrenheit. At soil temperatures below 50 degrees Fahrenheit, the micro-organisms that convert soil nitrogen to nitrate become inactive and the rate of conversion is rapidly reduced.
- A nitrification inhibiting additive (Nitrapyrin) will be included in the manure. This slows the conversion of ammonium to nitrate and lessens the potential for nitrate to contaminate groundwater resources.
- Manure will be applied via soil injection, which reduces the potential for surface water runoff and increases soil mixing with the manure to promote binding of nutrients with the soil and reduce nutrient transport from the field.
- Manure applications must not exceed the hydraulic capacity of the soil at any time.

Comment 5: One comment letter expressed concern that studies of typical application rates show plant life cannot absorb the amount of nutrients such facilities expel. (See comment letter 3.)

Response: The conditions of the Feedlot Permit, which will govern land application of manure operations from the Project, as well as Minnesota State law, require that the Project follow an MPCA-approved MMP. All MMPs in the State of Minnesota are developed according to University of Minnesota nutrient recommendations for the appropriate crop rotation and take into account realistic yield goals, application methods, nutrient density of the manure, soil fertility, proximity to sensitive features and is an enforceable condition of the permit. Application of manure applied from this Project will be subject to the MMP and State law. As a result, manure application rates must not exceed the crop needs for nitrogen and account for applied nitrogen from all sources. Applied phosphorus can lawfully exceed crop uptake only until soil test levels indicate that it has reached 21 ppm (Bray P1) or 16 ppm (Olsen). At that point, all applications must not exceed crop removal rates when any special protection area is present in the field, as defined in Minn. R. 7020.0300, subp. 23. **Special protection area.** "Special protection area" means land within 300 feet of: a) protected waters and protected wetlands, as identified on Minnesota Department of Natural Resources protected waters and wetlands maps; and b) intermittent streams and ditches identified on United States Geological Survey quadrangle maps, excluding drainage ditches with berms and segments of intermittent streams that are grassed waterways.

Comment 6: One comment letter expressed concern that the manure slurry of factory farms is full of heavy metals like copper, nickel, and manganese because the animals do not digest all that is in their feed as growth supplements. Spreading large amounts of these metals regularly over fields is dangerous. Experts say that once there is toxicity, you cannot remove it and plants will not grow there. The soil damage is permanent. Runoff from the fields also flushes the metals, along with excessive nitrogen and phosphorus from the manure, into waterways and public drinking water supply watersheds leading to fish kills and illness for consumers and swimmers. (See comment letter 3.)

Response: Nitrogen (N), phosphorus (P), copper (Cu), zinc (Zn), and manganese (Mn) are all essential nutrients in plant growth and development. Although the level of soil Cu and Zn at which plants are affected is variable and depends on plant species, pH, organic matter, and levels of other metals and nutrients (Chaney, 1993), the University of Minnesota Extension Service Ag Bulletin AG-BU-08424 (2007), states swine manure applications are unlikely to cause soil levels of Cu and Zn that are toxic to plants. Borkert et al. (1998) identified critical soil levels of 10 ppm Cu (Mehlich-3) for corn, 43 ppm Zn for soybeans, and 185 ppm Zn for corn. Tucker et al. (2005) stated that critical toxic levels for plants that not unusually sensitive are 60 ppm for Cu and 120 ppm for Zn (Mehlich-3). Even though some U.S. and Minnesota agricultural soils are above these levels (Holmgren et al., 1993; Linden et al., 1995), a study by Schmitt (1999) measured levels of 1 to 3 ppm of Cu and 4 to 8 ppm of Zn on sites with long-term dairy manure applications.

In addition, the EPA does not restrict biosolids applications based on Cu and Zn until the material has more than 1,500 mg/kg of Cu or 2,800 mg/kg of Zn (EPA, 1994). Swine manure is typically enriched to about 1,000 mg/kg for both Cu and Zn (Chaney, 1993). Cumulative application limits for a plot of land are 1,500 kg of Cu or 2,800 kg of Zn per acre (3,307 and 6,173 lbs/ac). A seven-year study by the University of Minnesota of deep pit manure storage areas found that swine finishing manure had approximately 230 mg/kg of Cu, 574 mg/kg of Mn, and 1,821 mg/kg of Zn. Applied at an agronomic rate (based on nitrogen needs of the crop) this would result in 0.42 lbs of Cu/ac, 3.3 lbs of Zn/ac and 1.0 lbs of Mn/ac, far below the EPA annual limits of 67 lbs Cu/ac and 125 lbs Zn/ac. No limit is given for the land application of Mn by the EPA. The proposed project will almost certainly have levels below this average because the majority of the swine are gestating or lactating sows. The nutrient formulation of the diet for sows has lower levels of enriched nutrients, thus excretion values will be lower. The crops grown over a two-year period between applications will remove a portion of the applied elements as well.

Comment 7: One comment letter expressed concern that some spring applications of manure will occur to maintain adequate storage at the facility. (See comment letter 7.)

Response: All manure will be pumped at least once per year; however, if field conditions are favorable, some manure applications may take place in the spring of the year, prior to the crop being planted. Applying manure in the spring, prior to crop growth, is considered a BMP because nutrients are applied closer to the time of crop uptake. In addition, all manure is treated with Nitrapyrin to slow the conversion of nitrogen to nitrate in the soil.

Comment 8: Three comment letters expressed concern about the location of some of the manure application sites being in close proximity to the Long Prairie River, Dismal Creek, and other surface waters. (See comment letters 7, 11, and 12.)

Response: All land application of manure from the Project will be governed by Minn. R. 7020.2225 and the federal Clean Water Act. Minn. R. 7020.2225, subp. 1 states that "manure must not be applied in a manner that will result in a discharge to waters of the state during the application process... or cause pollution of waters of the state due to manure contaminated-runoff."

As a condition of the Feedlot Permit, the project proposers will be required to follow the MPCA-approved MMP for Transferred Manure. That plan requires that the proposers test the manure annually to ensure that recipients of the manure can determine agronomic land application rates based on crop needs. Minnesota state law requires that all manure recipients have an MMP in place that regulates the timing, method of application, and amount of manure applied to each field based on proximity to

sensitive features, the nutrient density of the manure, the soil fertility levels in the soil, and realistic yield goals for the crop rotation. All rates are based on agronomic needs as determined by current research from the University of Minnesota and Minnesota rule.

Lastly, all manure application will be done via soil injection. This method of application is a recognized BMP for land application of manure. Expected rates of manure application are equivalent to approximately 0.5" of precipitation per acre. In addition, the Feedlot Permit prohibits unincorporated manure from being applied when precipitation events (+50 percent chance by National Weather Service) of greater than 0.5" are likely. A manure application on saturated soils in the upper six inches is also prohibited, unless approved by the MPCA. Given the application methods, rates and the soil conditions (slope steepness, slope length, erodibility and distance to water), the impacts of runoff from the land application sites is mitigated. (See also Responses to Comments 4, 5, and 9.)

Comment 9: One comment letter expressed concern that if the fields are tiled, the manure could seep through the dirt and run into the tile and right into the ditch. (See comment letter 10.)

Response: The estimated application rates are approximately 0.5 acre-inches every two years. This application rate is not expected to exceed the holding capacity of the soil. Nitrogen losses to tile drainage systems are controlled primarily by setting application rates to match nitrogen needs of the first crop. Application of manure from this proposed project is not expected to exceed the anticipated needs of the following crop. The needs are based on current University of Minnesota nutrient recommendations and are regulated by the MMP for Transferred Manure, an enforceable part of the Feedlot Permit. The project proposer will be utilizing a manure additive, Nitracypyrin, which inhibits the conversion of nitrogen to nitrate, and manure applications will be delayed until soil temperatures are below 50 degrees Fahrenheit. This is expected to reduce the conversion of soil-applied nitrogen to nitrate. (See also Responses to Comments 4, 5, and 8.)

Comment 10: One comment letter expressed concern that manure could run off the field into the creek and the river if clay is underneath the fields where the manure is land applied. (See comment letter 10.)

Response: Clay soils do have a slower infiltration rate than loamy or sandy soils. However, the Feedlot Permit prohibits the producer from applying manure to fields in a manner that will cause the manure to run off of the field. In addition, to prevent water quality impacts, the project proposer is required to follow the requirements of Minn. R. 7020.2225 for the land application of manure. Finally, the MPCA has and will take enforcement when manure is allowed to run off from fields and into waters of the State. (See also Responses to Comments 4, 5, and 8.)

Comments Related to Air Quality

Comment 11: One comment letter expressed concern that a citizen's test in Renville Co., Minnesota found that one-quarter of 32 tests taken near several manure lagoons from factory-scale hog lots exceeded Minnesota air quality standards for hydrogen sulfide. (See comment letter 3.)

Response: Ambient air monitoring of hydrogen sulfide has been conducted at the property lines near the large open air basin in Renville County using continuous air monitors (CAMs). Violations of the Minnesota hydrogen sulfide air quality standard were recorded in 1998. The facility owners signed Stipulation Agreements with the MPCA, paid large fines, and were required to cover the basins. The

Minnesota Legislature responded to the situation by banning open air manure storage for swine manure. As such, the proposed project has beneath-barn pits, and air modeling has shown that the proposed Project can be reasonably expected to comply with hydrogen sulfide standards.

Comment 12: Five comment letters expressed concern regarding odors that may be generated by the barn, manure storage, mortality compost structure, and the stormwater pond. (See comment letters 2, 3, 4, 6, and 10.)

Response: Ambient air quality standards are not established for the regulation of odor in Minnesota; however, air quality modeling using *CALPUFF* was conducted to estimate the ground level odor intensities at the feedlot's property lines and at neighboring residences. The maximum hourly odor intensity predicted at the expanded feedlot's effective property lines was 89 odor units (OUs). This would be above the "faint" odor threshold of 72 OUs, but below the "moderate" odor threshold of 212 OUs.

Additionally, the maximum odor intensity at 35 of the nearest neighbors was modeled. The highest modeled value at a nearby residence was 63 OUs which is below the "faint" odor threshold. Of the 35 sites modeled, the maximum value at 20 of the sites was below the "very faint" odor threshold of 25 OUs. Fifteen of the modeled sites had maximum predicted values that exceeded the "very faint" odor threshold.

Cumulative potential effects on air quality were also evaluated by comparing the Minnesota ambient air quality standards for hydrogen sulfide, inhalation health risk values (iHRVs) for ammonia, and odor intensity thresholds with concentrations in the air predicted by modeling. The modeling analysis included the estimated emissions from the proposed project and eight nearby feedlots, and incorporated conservative background concentrations to account for the potential impacts of air emissions from other feedlots. Air concentrations were estimated for these pollutants at the 35 residences located in the three square mile area surrounding the proposed project. All modeled concentrations were below the health-based and nuisance odor criteria used in the analyses and no violations of hydrogen sulfide standards were predicted. Therefore, the predicted cumulative potential air quality effects were not found to be significant in the project area.

Comment 13: One comment letter expressed concern that the landowners adjacent to the Project may not be given notice prior to agitation, pump out and distribution of the manure, which may have potential odor or air quality impacts. (See comment letter 7.)

Response: The project proposers are willing to notify and work with neighbors prior to removal and distribution of manure. The local County Feedlot Officer will be notified prior to all agitation and pumping events. All manure will be applied to existing cropland and must be injected and mixed into the soil profile immediately, thereby decreasing the potential for nuisance odors.

Comment 14: One comment letter expressed concern that the potential odor may carry across Lake Osakis. (See comment letter 8.)

Response: Air quality modeling done for the project proposal indicates that the odor from the Project will not carry across Osakis Lake.

Comment 15: One comment letter expressed concern that the potential odor from the liquid manure may stay in the air for days after being spread. (See comment letter 8.)

Response: Minn. Stat § 116.0713 requires that hydrogen sulfide standards are met with the exemption of 21 days for removal and land application of manure. This facility intends to transfer manure to recipients whom will inject the manure upon application, which greatly reduces potential odor issues. In addition, the facility will maintain an air emissions and odor management plan that will identify several ways to mitigate potential odor issues.

Comments Related to Compliance and Enforcement

Comment 16: One comment letter stated that large hog feedlots should be more stringently regulated. (See comment letter 2.)

Response: The construction and operation of swine feedlots is regulated under Minn. R. 7020, applicable State statutes, and the applicable portions of the code of federal regulations. The Project is subject to a Feedlot Permit that will incorporate the existing rules and regulation requirements in a single permit. The MPCA will regulate the Project under the permit and enforce all terms and conditions of the permit and pertinent rules and statutes.

Comment 17: One comment letter questioned the scope of the plan if an accident occurred in which the walls of the beneath ground pit were to fail or the pipe used to transport the manure to the projected injection sites failed. (See comment letter 10.)

Response: The Project is required to prepare and retain an Emergency Response Plan on the site. The plan identifies people and equipment needed to immediately stop the source of the leak, contain the spilled manure, notify the Minnesota Duty Officer, and clean up the spill immediately and document the actions taken. The beneath-barn concrete liquid manure storage is designed by a licensed engineer to meet current rule requirements established to minimize the possibility of a failure.

Comment 18: One comment letter questioned whether the MPCA conducted an investigation to see if the Gourley Brothers were in compliance with the rules and regulations at their other facilities in Minnesota and Iowa. (See comment letter 10.)

Response: The Gourley Brothers do not own any other swine feedlots in Minnesota. The MPCA does not have jurisdiction to inspect Gourley Brothers facilities not subject to Minnesota law.

Comments Related to Public Health

Comment 19: One comment letter expressed concern that swine infections may be transmitted to humans, some with potentially serious outcomes including streptococcus suis meningitis, swine influenza, scabies, ringworm, and salmonellosis. (See comment letter 3.)

Response: Based on information provided by Dr. Patrick Fitzsimmons, DVM, on behalf of the project proposer, and reviewed by Dr. Joni Scheftel, DVM, Minnesota Department of Health, the MPCA staff provides the following response:

Streptococcus suis meningitis

Although it is possible for humans to contract *Streptococcus suis* (*S. suis*) from infected pigs, the incidence of this happening is very rare. The *New England Journal of Medicine*, along with many other sources, reports the rate to be 3 in 100,000 if you work in close proximity with pigs and 1.2 in 100,000 if you are a butcher. If you are not a farm worker or a butcher, your chance is 1,500 times less than this. Therefore, the probability of an average person getting an *S. suis* infection is about 2 in 10,000,000. Most recent cases have been in under-developed countries where pigs are raised in outside conditions, there is little control of manure, and the farmers typically live in direct contact with the pigs.

Swine influenza

Many of the diseases found in mammals are species-specific. Although there can be a link between swine influenzas and human influenza virus, many swine influenza viruses are unable to replicate and transmit between humans. Swine have receptor sites capable of replicating swine, avian and human influenza viruses. The major concern with “swine flu” is that a pig will become infected with an avian or a human virus at the same time they are replicating a swine flu virus. A mutation called a reassortment may occur that will be capable of transmitting between people. This has been a very rare event over the last 70 years.

Scabies

This is a skin disease found in humans and other mammals, but in almost all cases, they are species-specific (meaning that it will not infect other species). It has nearly been eradicated in modern hog confinement buildings.

Ringworm

The industry shift to raising pigs in total confinement barns has led to the decrease, if not elimination of, ringworm, a contact disease. Most cases of ringworm in swine are the result of exposure to dogs, cats, or rats.

Salmonellosis

Pathogenic serotypes for swine are relatively few, with most outbreaks caused by *Salmonella choleraesuis* or *S. serotype typhimurium*. Serotypes that are the most common cause of disease in both people and swine include *S. serotypes typhimurium*, *S. enteritidis*, *S. agona* and *S. heidelberg*. *Salmonella choleraesuis* and *S. serotype typhisuis* are host-adapted to swine and are rarely isolated from sources other than infected swine. Salmonellosis is considered a food-borne disease but is more commonly caused by other food types other than pork (e.g., poultry, milk products, and beef). Salmonellosis has rarely, if ever, been reported due to exposure to live swine or swine waste.

Comment 20: Two comment letters expressed concern about the health effects caused by large containment farms, particularly related to allergens. (See comment letters 3 and 10.)

Response: The primary health issues of concern are those related to air emissions and groundwater quality. Air quality modeling is required in feedlot EAWs and groundwater protection is afforded by conformance with established design and operating criteria. The potential for significant environmental impact, as presented in the EAW, looks at those issues outlined in the Alternative EAW Form for Animal Agriculture.

In addition, land use ordinances protect the health, safety, and welfare of surrounding residences by establishing zoning districts. Within those zoning districts, the ordinances establish permitted uses and conditional uses. For permitted and conditional uses, the ordinance has specific setbacks and limits. The proposed project is planned within the agricultural district of Todd County, and in light of the proposed size of the feedlot, it is a conditional use. As a conditional use, the Project will have to obtain a Conditional Use Permit (CUP) from Todd County. Section 5.05, Part C of the Todd County Zoning Ordinance states, "In permitting a new conditional use or the alteration of an existing conditional use, the Planning Commission may recommend the imposition, in addition to the standards and requirements expressly specified by this Ordinance, of additional conditions which the board considers necessary to protect the best interest of the surrounding area or the county as a whole." Todd County will determine whether the proposed project meets the criteria of a conditional use consistent with the Todd County Land Use Ordinance. The information developed as part of this environmental review process is available to Todd County to aid in determining whether to issue the CUP. The county may impose further conditions, if desired.

Comment 21: One comment letter opined that the large-scale indiscriminate use of antibiotics in animals could lead to antibiotic resistance in bacteria that cause disease in humans. (See comment letter 3.)

Response: The project proposers state they are very prudent in the use of antibiotics in swine production. Newborn piglets are given a single dose of preventive antibiotic therapy. The sows are treated only on an as-needed basis and normally through individual treatments. The swine industry uses and follows Pork Quality Assurance protocols that insure that all employees are trained in the use of antibiotics for treatments. The project proposers also train these employees and workers on safe handling and care of animals.

Comments Related to Safety

Comment 22: One comment letter expressed concern that gasses in the total confinement barn may displace oxygen causing an oxygen depleted atmosphere and resulting in asphyxiation. (See comment letter 3.)

Response: Asphyxiation can be a risk in total confinement hog barns. New total confinement hog barns have power ventilation for both the pit gasses and for the barn. Minimum ventilation rates must be maintained for the sows and is calculated on a per animal basis. Electricity to the barn is constantly monitored and backup generators are on the site. Temperature in the barn is also constantly monitored with triggers for hot and cold temperatures.

Comment 23: One comment letter stated that gases such as hydrogen sulfide may interfere with oxygen utilization by cells causing a cessation of aerobic respiration leading to cell death. (See comment letter 3.)

Response: Hydrogen sulfide is toxic at certain concentrations, thus, the Minnesota Department of Health has established iHRVs. Hydrogen sulfide is produced in anaerobic conditions that occur in the pit beneath the barn. The manure pit is constantly ventilated to prevent the buildup of gasses beneath the pigs. Air modeling predicted that the iHRV for hydrogen sulfide would not be exceeded at any of the 35 residences located nearest to the Project.

Comment 24: One comment letter expressed concern that methane at the facility may be an explosion hazard. (See comment letter 3.)

Response: Methane is a product of anaerobic respiration, which can occur in the manure pits beneath barns. As stated above the manure pits are constantly ventilated to prevent the buildup of harmful gasses beneath the pigs. Many commercial manure pumpers will monitor the barn for ammonia and methane during agitation and pumping of the manure from the barn. However, the project proposer has stated that he will not allow agitation of the manure as agitation can cause a “release” of gases from the manure.

Comment 25: One comment letter expressed concern that the Project is not subject to OSHA regulations, which would otherwise protect workers from the dusts, gases, and toxins that are present in factory farms and hazardous to health. (See comment letter 3.)

Response: A farming operation is exempt from all OSHA activities if it: 1) employs 10 or fewer employees currently and at all times during the last 12 months; and 2) has not had an active temporary labor camp during the preceding 12 months. Note: Family members of farm employers are not counted when determining the number of employees.

Comments Related to Other Issues

Comments 26: Four comment letters expressed concern that the proposed project may impact surrounding property values. (See comment letters 2, 3, 4, and 5.)

Response: An analysis of economic effects, such as the effect on property values, is beyond the scope of information included in an EAW as defined in Minn. R. 4410.1200. A Responsible Governmental Unit determines the need for an EIS based on the potential for significant environmental effects. If an EIS is ordered, socio-economic issues would be made part of the scope of the EIS.

Comment 27: One comment letter expressed concern that if the confinement feedlot goes out of business taxpayers can be left with the cleanup, which in other locations has been in the millions of dollars. (See comment letter 3.)

Response: The Project Proposer is responsible for removal and appropriate land application of manure from its facility. The owner of the real property may remove the manure and close the Site if required. In some circumstances, the producer or a bank may be tasked with such activities if it owns the property.

Comment 28: Three comment letters expressed concern that the proposed Project will drive smaller feedlot operations out of business. (See comment letters 4, 6, and 8.)

Response: Comments on socio-economic issues are beyond the scope of information to be included in the EAW as defined in Minn. R. 4410.1200. If an EIS is ordered, some of these issues could be made part of the scope of the EIS.

Comment 29: One comment letter expressed concern that the public was provided one week to respond to the public notice for the proposed Project at a time when most people typically schedule vacation. (See comment letter 5.)

Response: The procedures for environmental review are established by Minnesota rules (see Minn. R. ch. 4410). The 30-day comment period for the EAW began on July 23, 2012. The MPCA sent out the press release via GovDelivery (the State of Minnesota internet-based information system) on July 24, 2012, and it was posted on the news release section of the MPCA's website on that day. The comment period ended on August 22, 2012.

Comment 30: One comment letter questioned what the environmental impact of the Project may be. (See comment letter 6.)

Response: The EAW evaluates the potential for environmental impacts. If the EAW indicates that there is a potential for significant environmental impacts, the MPCA will order the preparation of an EIS, which more fully examines the potential impacts.

Comment 31: One comment letter indicated the tax dollars generated for Leslie Township from the operation of the facility are outweighed by the cost to the people who live in the Township and the cost to the environment. (See comment letter 6.)

Response: Comments on socio-economic impacts are beyond the scope of information to be included in the EAW as defined in Minn. R. 4410.1200. If an EIS is ordered, some of these issues could be made part of the scope of the EIS.

Comment 32: One comment letter indicated there was an error in the EAW; County Road 1 is paved, but County Road 65 is gravel.

Response: This comment is noted; County Road 65 is gravel.

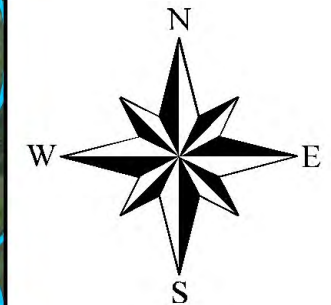
Gourley Brother Hog Feedlot - County Well Index Map

Exhibit 1



Legend

- ⊕ CWI Wells
- Streams
- Land Application Sites



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Miles

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