



# Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 800-675-3843 | 651-282-5332 TTY | [www.pca.state.mn.us](http://www.pca.state.mn.us)

July 29, 2009

TO: INTERESTED PARTIES

RE: Dollymount Dairy, LLP

On July 28, 2009, the Minnesota Pollution Control Agency Citizens' Board voted to approve the amended Findings of Fact, Conclusions of Law, and Order for a Negative Declaration on the need for an Environmental Impact Statement for the proposed Dollymount Dairy, LLP, Traverse County. The amended Findings of Fact, Conclusions of Law, and Order included new language pertaining to the results of revised air quality modeling at Finding 17. The Findings of Fact, Conclusions of Law, and Order document concludes that the project does not have the potential for significant environmental effects. This decision for a Negative Declaration completes the state environmental review process under the revised Minnesota Environmental Quality Board Rules, Minn. R. 4410.0300 - 4410.7800. The Citizens' Board also voted to approve the Findings of Fact, Conclusions of Law, and Order to deny the request for a Contested Case Hearing on the issuance of coverage under the General National Pollutant Discharge Elimination System/State Disposal System Permit to Dollymount Dairy.

We appreciate the time and effort of those who submitted comments on the Environmental Assessment Worksheet. Your input helped to clarify the final documents and will be helpful in drafting permits for the project's construction and operation.

Sincerely,

A handwritten signature in black ink that reads "Paul Eger".

Paul Eger  
Commissioner

PE:mbo

**STATE OF MINNESOTA  
MINNESOTA POLLUTION CONTROL AGENCY**

**IN THE MATTER OF THE DECISION  
ON THE NEED FOR AN ENVIRONMENTAL  
IMPACT STATEMENT FOR THE PROPOSED  
DOLLYMOUNT DAIRY, LLP  
DOLLYMOUNT TOWNSHIP  
TRAVERSE 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 July 28, 2009. Based on the MPCA staff review, 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. Dollymount Dairy, LLP (Dollymount Dairy) is proposing to construct a new dairy facility in Section 4 of Dollymount Township in Traverse County (Project). The facility is designed to accommodate up to 6,640 head of dairy livestock, totaling approximately 7,350 animal units. Dollymount Dairy will include one 1,200-foot long by 512-foot wide barn; one 228-foot long by 134-foot wide calf barn; two 80-foot wide by 216-foot long calf barns; and one 425-foot by 95-foot wide milking parlor/holding pen. Manure will be processed in an anaerobic digester where the gasses will be captured to produce electricity. Once digested, a separator will remove the majority of the solids from the digestate. The solids will be used for animal bedding and the liquid will be stored in two 690-foot long by 450-foot wide by 20-foot deep clay-lined earthen basins with impermeable high-density polyethylene (HDPE) synthetic covers. Liquid manure stored in the basins will be land applied in compliance with an MPCA-approved Manure Management Plan (MMP). Feed for the cattle will be stored on a 700-foot long by 400-foot wide covered feed storage pad. Runoff from the site will be directed to a stormwater pond located on the site. The entire site is 120 acres. Dollymount Dairy has submitted an MMP identifying acres that will be used for manure application.
2. On November 3, 2008, the MPCA received an application for coverage under the National Pollutant Discharge Elimination System/State Disposal System General Livestock Production Permit No. MNG440668. This is a construction and operational permit that requires the applicant to abide by the federal discharge standards contained within 40 CFR § 412.31, commonly referred to as the zero discharge standard, as there can be no discharge of pollutants to waters of the United States/State from the facility. This is a new project; no permits have been issued.

### **Previous Environmental Review**

3. No previous environmental review action has been undertaken for this Project. In 2002, a different group of project proposers applied for a permit to construct a dairy facility to be called Dollymount Dairy at a nearby site in Section 9 of Dollymount Township, and a draft EAW was prepared by the MPCA. However, that project was withdrawn before a final EAW was prepared, so no environmental review was completed.
4. In 2006, the MPCA prepared another EAW for a dairy project in Section 4 of Dollymount Township. An EAW was published and public comments were received on this project, which was also called Dollymount Dairy; however, the EAW was withdrawn prior to the Board meeting, and no final decision was made on whether that project required an EIS or could be permitted as designed.
5. The present Dollymount Dairy project differs significantly from the preceding proposals insofar as it proposes to use a different barn design with different bedding material and a different manure storage area design, including an anaerobic digester to process the manure and collect the bio-gas for use in generating electricity, the use of manure solids separators, and covered manure storage basins.

### **Compliance/Enforcement History**

6. This is a new project; there is no applicable enforcement history to discuss. The Project proposers, in conjunction with other investors, currently operate five other active dairy facilities and two active calf-raising sites, and are permitted to construct one more dairy facility in Minnesota. The MPCA has received one odor complaint from a resident near one of the calf-raising facilities. In response to the complaint, a fence was erected at the site to improve dispersion of the air and help mitigate the odor concerns. Since this site modification, no additional complaints have been received. The MPCA has no significant history of feedlot enforcement issues with regard to the dairy facilities.

### **Environmental Concerns**

7. As a dairy, the proposed Project involves the potential for impacts on water quality, both at the dairy site itself and on land used to apply manure, and on air quality as a result of potential odor emissions and hydrogen sulfide emissions.

#### Additional Concerns Described in Comment Letters

8. The following issues of concern were identified in written comments received during the public comment period (Attachment 3). These comments are addressed in the Responses to Comments found in Attachment 4. Attachment 3 and Attachment 4 are incorporated into the Findings of Fact, Conclusions of Law, and Order for this proposed Project. The issues identified are as follows:
  - General water pollution concerns related to the manure basins and manure application sites
  - General groundwater concerns related to the manure basins
  - General air quality concerns related to human health and air quality modeling
  - Flooding concerns related to the dairy site and manure application acres
  - Land application concerns related to nutrients and impaired waters
  - Cumulative impacts, on both air quality and water quality, including worker safety
  - Enforcement of feedlot rules by MPCA

- Traffic/impact on roads
- Antibiotic use
- Adequacy of information concerning bedrock, aquifers, tile inlets, and wells
- Manure spills
- Perimeter tile monitoring plan
- Validity of the manure application agreements
- Access to the manure application acres

### **Procedural History**

9. Pursuant to Minn. R. 4410.4300, subp. 29, an EAW was prepared by the MPCA staff on the Project. Pursuant to Minn. R. 4410.1500, the EAW was distributed to the Environmental Quality Board (EQB) mailing list and other interested parties on April 17, 2009.
10. The MPCA notified the public of the availability of the EAW for public comment. A news release was provided to media outlets on April 20, 2009. In addition, the EAW notice of availability was published in the EQB Monitor on April 20, 2009, and made available for review on the MPCA Web site on April 20, 2009, at <http://www.pca.state.mn.us/news/eaw/index.html>.
11. The public comment period for the EAW began on April 20, 2009, and ended on May 20, 2009. During the 30-day comment period, the MPCA received ten comment letters from citizens, one comment letter from a law firm representing certain citizens who were not specifically identified, and one comment letter from the Minnesota Department of Natural Resources (DNR). One letter was received after the end of the EAW comment period.
12. The comment letters received by the MPCA are reproduced in Attachment 3 and are incorporated herein by reference. The MPCA prepared responses to all comments received during the 30-day public comment period. The responses to comments are reproduced in Attachment 4 and are incorporated herein by reference.

### **Criteria for Determining the Potential for Significant Environmental Effects**

13. Under Minn. R. 4410.1700, the MPCA must order an 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. These criteria are:
  - A. the type, extent, and reversibility of environmental effects;
  - B. the potential cumulative effects of related or anticipated future projects;
  - 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.

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

**Type, Extent, and Reversibility of Environmental Effects**

14. The first criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects that are reasonably expected to occur is the "type, extent, and reversibility of environmental effects" Minn. R. 4410.1700, subp. 7. A. The MPCA findings with respect to each of these factors are set forth below.

Air Quality

15. The EAW evaluated the impacts on air quality related to air emissions of hydrogen sulfide, ammonia and odor from the Project. The air emissions are produced directly by the livestock themselves and indirectly as a result of operation of the barns and manure storage system. Air emissions are also produced during manure application activities.
16. The proposed facility will include an anaerobic digester that will help reduce odors and air emissions from the facility through the digestion of organic compounds in the manure, which produce the majority of odors and air emissions at dairy facilities. Digestion will occur under controlled conditions in an air-tight vessel so the gases can be collected. The gases to be produced, primarily methane, will be used to power two generators to create electricity. The proposed facility will also operate with HDPE covers on the two larger manure storage basins. Additionally, if a bio-solids crust does not naturally form on the smaller settling basin, Dollymount Dairy will maintain a straw cover on the settling basin. The covers will direct air emissions to a flare system for combustion and destruction of the odorous compounds. The combination of anaerobic digestion and long-term covered storage are largely regarded as the most effective odor and air emission control methods available. Additionally, the proposed facility has performed an analysis of the need for an air emissions permit as a result of the combustion of the bio-gas and the flare system and has concluded that an air emissions at the Project site will be below the level at which an air emissions permit is required.
17. Air quality modeling conducted by the Project proposers estimated the atmospheric concentrations of hydrogen sulfide and ammonia, and the detectability of selected odorous gases at the property lines for the proposed Project and at the proposed feedlot's nearest neighbors. The estimated hydrogen sulfide and ammonia concentrations were compared to established state ambient hydrogen sulfide standards and inhalation health risk values for hydrogen sulfide and ammonia, and the estimated odor levels were compared to published odor thresholds. This study indicated that the facility will not exceed the ambient air quality standards or inhalation health risk values, or generate more than faint odors detectable at the Project's property lines. Due to the closeness of the hydrogen sulfide numbers to the ambient standard in that study, the Project was required to have a bio-solids crust or maintain a straw cover on the settling basin to provide an additional margin of safety to ensure compliance with the standard. A revised air modeling study was submitted to the MPCA on

July 17, 2009. It estimated conditions that would exist with a crust on the settling basin. The revised study also incorporated more representative sulfide concentration data for the stormwater basin, which was obtained from samples taken from similar basins. The highest estimated property-line hydrogen sulfide concentration from the revised report was 26.8 ppb, indicating that the ambient standard will not be exceeded. The biosolids crust or straw cover requirement for the settling basin will be retained. The MPCA finds that this information is adequate to allow a reasoned decision to be made on the environmental impacts of the Project related to its air quality.

18. The MPCA finds that the Project does not have the potential for significant environmental effects as a result of air emissions. Air emissions will meet state standards and/or health risk values at the property boundary and at neighboring residences.
19. The MPCA further finds that any environmental effects from air emissions that might occur can essentially be “reversed” by eliminating the source of the emissions.
20. The MPCA received several comment letters that expressed concerns regarding potential effects to air quality. The comment letters expressed general concerns with regard to the air quality modeling, background concentrations, and predicted human health impacts. As discussed above in Findings 15 through 17 above, and in the Responses to Comments, the MPCA’s analysis indicates that the impacts on air quality that are reasonably expected to occur from the project are not significant.
21. The air impacts from this Project will be mitigated by the anaerobic digestion of manure and the installation of synthetic basin covers on the two large manure storage basins and a bio-solids crust or straw cover on the smaller settling basin. While the MPCA has determined that an air emissions permit is not required, the NPDES/SDS Permit will require the installation and operation of these systems as part of the Project’s approved engineering plans.
22. The MPCA finds that the environmental review that has been conducted on this Project is adequate to address the concerns raised in the comment letters. The air modeling analysis was conducted with an MPCA-accepted protocol that employed reasonable and conservative assumptions that are standard with regard to this type of analysis and which have been verified by field data. The MPCA deems the results of the air quality modeling to be reliable.
23. All potential impacts on air quality that are reasonably expected to occur from the proposed Project have been considered during the review process. The MPCA notes that air quality impacts from this project, including greenhouse gases, will be mitigated by the use of the digester system, and because the manure storage basins will be equipped with synthetic covers and a flare to control emissions of hydrogen sulfide and odors. Emissions during manure management activities will be of limited duration and are expected to have no health impacts.
24. For the reasons set forth above and in the Responses to Comments document, the MPCA finds that the proposed Project does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of its air emissions.

### Water Quality and Water Supply

25. The EAW evaluated the water quality impacts that are reasonably expected to occur from the Project. These included impacts to surface and groundwater related to activities on the Project site and at manure management acres, and impacts on groundwater related to manure storage structures. The EAW also contained information on whether the water supply was adequate to support the Project's appropriation of water for its dairy activities.
26. The EAW and administrative record included the engineering plans for manure storage, MMP, operation and maintenance plan, emergency response plan, soil analysis reports, animal mortality plan, and well pump test results. The MPCA finds that this information is adequate to allow a reasoned decision to be made on the environmental impacts of the Project related to its impacts on the quality and availability of surface and groundwater resources.
27. The proposed facility will be a total confinement dairy facility, meaning that all animals will be housed under roof and the manure produced will not be exposed to precipitation. This will for all practical purposes eliminate the potential for manure-contaminated runoff at the Project site. The manure generated at the facility will first be stored and processed in an anaerobic digester that will reduce the organic content of the manure while producing bio-gas to be used to generate electricity. After the digester, most of the remaining solids will be reclaimed for use as bedding material, and the liquid manure will be stored within clay-lined storage basins before it is applied to cropland as a replacement for commercial fertilizer. The earthen liners of the basins are designed by a licensed professional engineer and meet all seepage requirements set forth in Minn. R. ch. 7020, which is designed to be protective of both surface and groundwater resources.
28. In regards to the land application of manure, the facility has developed an MMP that meets all requirements of Minn. R. ch. 7020 as well as those requirements contained within the NPDES/SDS Permit. The MMP indicates that land application of manure will be done by knife injection. This method of application places the manure beneath the soil surface and greatly reduces the chance that the nutrients could be transported by runoff from the fields. The nitrogen within the manure will be applied at agronomic rates to alleviate concerns with nutrient leaching and/or excess available nutrients remaining after the crop is harvested. The potential for buildup of phosphorus in the soils will be addressed by periodic testing of soil phosphorus levels and by giving priority for manure application to sites with lower phosphorus levels. Soils on the proposed application sites generally have low levels of phosphorus under current conditions.
29. Several commenters expressed concerns related to surface water impacts from the operation of the proposed Project. In particular, concerns were expressed over whether phosphorus and nitrogen in manure used for application would impact waters listed on the MCPA list of impaired waters. For the reasons set forth in the Responses to Comments and described in Finding 28 above, the MPCA finds that the manure used for application will not impact waters already classified as impaired. The MPCA further finds that the manure can be applied in compliance with state standards and the permit, and that the phosphorus content in the manure will not cause phosphorus to build up at land application sites.

30. Several commenters expressed concern that the clay liners in the manure storage basins and the high water table in the Project area will allow manure from the basins to contaminate groundwater. For the reasons set forth in the Responses to Comments, the MPCA finds that the basins' engineering will be adequate to protect groundwater resources. (*See* Attachment 4, Comments 5, 6, and 41-47)
31. Several commenters expressed concern that overland flooding will cause significant impacts to surface waters as a result of the Project. For the reasons set forth in the Responses to Comments, the MPCA finds that overland flooding conditions will not result in significant environmental impacts either at the dairy site or at fields used for manure application. As noted in the Responses to Comments, the Project proposer will apply manure using knife injection, adhere to state and locally mandated setbacks from water bodies, and apply manure primarily during the fall when field conditions tend to be more favorable for application of manure. In addition, phosphorus in the manure is readily bound by soil constituents, and spring flooding is not expected to liberate large volumes of nutrients due to the fact that there is limited contact between the nutrients beneath the soil surface and overland flood water. (*See* Attachment 4, Comments 32-34)
32. The MPCA finds that any potential water quality effects that are reasonably expected to occur from the Project would be reversible. The constituents of concern in manure are not persistent or bioaccumulative and, in the unlikely event that a manure spill or excess application would occur, the water body affected will recover with proper management. Under the MMP incorporated into the NPDES/SDS Permit, the permittee will be required to test soils at least every four years for phosphorus levels and to test manure annually for nitrogen and phosphorus. If the permittee finds that excess phosphorus has built up in the soil, the dairy must manage the fields to reduce soil phosphorus levels to acceptable levels.
33. The MPCA finds that the Project does not have the potential for significant environmental effects as a result of impacts on water resources that are reasonably expected to occur from the Project. The MPCA finds that the Project can be operated in compliance with state standards applicable to water quality. Data in the EAW supports the conclusion that there is adequate water to support dairy activities without interference with other well users.
34. The MPCA finds that the environmental review that has been conducted on this Project is adequate to address the concerns related to water because all potential impacts to water quality that are reasonably expected to occur from the proposed expansion of this Project have been considered during the review process and a method to prevent these impacts has been developed. The engineering of the Project complies with industry- and MPCA-accepted protocols that are standard with regard to this type of facility and that have been verified by field data.
35. The MPCA finds that the Project, as proposed, does not have the potential for significant environmental effects on water quality based on the type, extent, and reversibility of environmental impacts reasonably expected to occur.

### **Cumulative Potential Effects of Related or Anticipated Future Projects**

36. 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 of related or anticipated future projects" Minn. R. 4410.1700, subp. 7(B). The MPCA findings with respect to this criterion are set forth below.
37. The EAW, public comments, and MPCA technical evaluation did not disclose any related or anticipated future projects that may interact with this proposed Project in such a way as to cause any potential cumulative environmental effects. There are no other facilities currently operating or planned in the vicinity of the proposed Project that are anticipated to have emissions that will increase the background level of hydrogen sulfide or ammonia. Similarly, the MPCA has no information suggesting that there are other current or planned projects that would be significant users of water.
38. Several commenters expressed concerns about the development and use of the hydrogen sulfide background concentration to account for cumulative impacts on air quality. The MPCA has addressed these concerns in the response to Comments 102 and 103 (Attachment 4). Based on MPCA staff experience; available information on the proposed Project, including air quality modeling, and information presented by the commenters, the MPCA does not reasonably expect significant cumulative effects from this Project related to air quality.
39. Some commenters expressed concerns that discharges from manure application fields used by the Project would, along with existing impacts, increase the loading of pollutants responsible for the impairments to waters in the Project area. As noted above and as discussed in more detail in the Responses to Comments, the MPCA finds that the manure application resulting from the Project will not cause cumulative impacts in the manner suggested. The MPCA notes that all acres identified for manure application are already used for crop production at this time and therefore can be assumed to already receive applications of manure or commercial fertilizer from other sources. The construction of the Project will not introduce nutrients where none currently exist. The Project will merely provide an alternative source for the nutrients currently being applied.
40. One commenter stated that the MPCA should inventory the greenhouse gas emissions expected to be generated by the proposed Project. The MPCA acknowledges that animal husbandry is a source of greenhouse gas emissions; however, as discussed in the response to Comment 100, the MPCA does not require all projects to conduct a greenhouse gas emissions inventory. In this case, the MPCA finds that the digester and covered manure storage basins will eliminate a large percentage of the greenhouse gases that might otherwise be expected to be generated as a result of this Project. Under these circumstances, the MPCA finds that it is not reasonable to require the proposer to prepare a greenhouse gas analysis.
41. The MPCA further finds that although the Project will generate greenhouse gases, it is not possible, given existing credible scientific evidence, to do anything other than speculate about what the impacts will be from the contribution of this Project (when combined with others). Climate models currently available are unable to predict with any degree of certainty the conditions that will result,

even for the North American continent. As a result, the MPCA finds that it would not be reasonable to conclude that the environmental effects of this Project will be significant as a result of its contribution to greenhouse gases.

42. In considering the cumulative potential effects of related or anticipated future projects, the MPCA finds that the reasonably expected impacts from this proposed Project will not be significant.

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

43. 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," Minn. R. 4410.1700, subp. 7(C). The MPCA findings with respect to this criterion are set forth below.

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

Unit of Government	Permit or Approval Required	Status
A. MPCA	NPDES/SDS Feedlot/Stormwater Permit	Application has been submitted to the MPCA for review.
B. DNR	Water Appropriation	To be applied for upon completion of the EAW.
C. Traverse County	Conditional Use Permit	Final permit to be issued upon completion of environmental review.
D. Traverse County	Septic System Permit	Final permit to be issued upon completion of environmental review.
E. Bois de Sioux Watershed District	Stormwater/Drainage Permit	Final permit to be issued upon completion of environmental review.

45. The following paragraphs describe the ongoing public regulatory control that will be provided through the required permits:

A. MPCA NPDES/SDS Feedlot/Stormwater Permit

This permit is required for the proposed Project as the Project exceeds the mandatory thresholds established in Minn. R. ch. 7020.0405, Subp. 1. The MPCA is delegated to administer this NPDES/SDS Permit, which will require the Project's adherence to specific conditions for construction and operation, including land application of the manure and for overall compliance with air and water quality requirements. The permit requires MPCA approval of an MMP, an operation and maintenance plan, an air emissions plan, an emergency response plan, an animal mortality plan, a stormwater pollution prevention plan, and design plans and specifications that provide the project-specific details.

B. DNR Water Appropriation Permit

This permit is required for the proposed Project because, as noted in the EAW under Item 15(C), the estimated water use of the proposed Project at full production will be approximately 80 million gallons per year. The DNR requires all projects that will pump more than 10,000 gallons of groundwater per day or over one million gallons per year to obtain a water appropriation permit to ensure that the anticipated water usage will not have a negative impact upon the groundwater resources in the vicinity.

C. Traverse County Conditional Use Permit

This permit addresses zoning and environmental regulatory requirements in Traverse County. The Project must have a conditional use permit (CUP) to operate. Traverse County will require Dollymount Dairy to submit information deemed necessary to mitigate potential impacts on neighboring land uses and publicly owned infrastructure. Traverse County has the authority to review and modify the conditions of Dollymount Dairy's CUP as needed to ensure the health, safety, and welfare of local citizens. Local environmental requirements may be more stringent, but not less stringent, than state regulatory requirements.

D. Traverse County Septic System Permit

This permit is required to ensure that on-site septic tanks, drain fields and appurtenances will be installed according to Minn. R. ch. 7080. These rules require septic tanks and drain fields to be installed in a manner that ensures the septic system will adequately treat the Project's wastewater and will not cause groundwater pollution.

E. Bois de Sioux Watershed District Stormwater/Drainage Permit

This permit addresses the conditions for discharge of stormwater to the drainage system regulated by the Bois de Sioux Watershed District.

46. The MPCA finds that environmental effects that are reasonably expected to occur from the Project can be mitigated 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**

47. 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.

48. The following documents were among those reviewed by MPCA staff as part of the potential environmental impact analysis for the proposed construction of the Project:
- EAW data submitted by the Project proposer
  - NPDES/SDS Permit application
  - Information and analysis generated by MPCA and DNR staff
  - Air dispersion modeling report and memorandum, and air permit applicability determination submitted by the Project proposer

This list is not intended to be exhaustive. The MPCA also relies on information provided by the Project proposer and commenters, staff experience with similar projects, and other available information.

49. The MPCA finds that these studies were adequate to anticipate the environmental impacts of the Project and plan for control of those impacts.
50. Based on the environmental review, previous environmental studies, and MPCA staff expertise on similar projects, the MPCA finds that the environmental effects of the proposed Project that are reasonably expected to occur can be anticipated and controlled.

#### **CONCLUSIONS OF LAW**

51. The MPCA has jurisdiction to determine the need for an EIS for this proposed Project. The information obtained during preparation of the EAW, the permit development process, the preparation of responses by MPCA staff in response to public comments on the EAW, 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 Project.
52. Areas where the potential for significant environmental effects may have existed have been identified and appropriate mitigation measures have been incorporated into the Project design and permits. The proposed Project is expected to comply with all MPCA standards.
53. Based on the criteria established in Minn. R. 4410.1700, the proposed Project does not have the potential for significant environmental effects.
54. An EIS is not required.
55. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

On the Need for an Environmental Impact Statement  
Dollymount Dairy, LLP  
Dollymount Township, Traverse County, Minnesota

Findings of Fact  
Conclusions of Law  
And Order

**ORDER**

The Minnesota Pollution Control Agency determines that there are no potential significant environmental effects reasonably expected to occur from the Dollymount Dairy, LLP project and that there is no need for an Environmental Impact Statement.

**IT IS SO ORDERED**



---

Commissioner Paul Eger  
Chair, Citizens' Board  
Minnesota Pollution Control Agency

7/29/09

---

Date

**STATE OF MINNESOTA  
MINNESOTA POLLUTION CONTROL AGENCY**

**IN THE MATTER OF THE REQUEST  
FOR A CONTESTED CASE HEARING  
ON THE PROPOSED ISSUANCE OF COVERAGE  
UNDER GENERAL NPDES/SDS  
PERMIT NO. MNG440668, FOR THE  
DOLLYMOUNT DAIRY, LLP  
CONFINED ANIMAL FEEDING OPERATION  
TRAVERSE COUNTY  
DOLLYMOUNT TOWNSHIP, MINNESOTA**

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

The above-entitled matter came before the Minnesota Pollution Control Agency (MPCA) Citizens' Board (Board) at the July 28, 2009, meeting held in St. Paul, Minnesota. Based on the MPCA staff review, comments and information received during the public notice comment period for the environmental assessment worksheet (EAW), and other information in the record of the MPCA, the MPCA hereby makes the following Findings of Fact, Conclusions of Law, and Order:

**FINDINGS OF FACT**

1. This matter involves a request made by commenter James Peters of the law firm Peters & Peters PLC, for a Contested Case Hearing on the proposed issuance of coverage under the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Livestock Production Permit No. MNG440668 (Permit), for the construction and operation of the proposed Dollymount Dairy, LLP (Dollymount Dairy) confined animal feeding operation (Facility or Project). The MPCA must decide whether, under applicable statutes and rules, it should grant or deny, in whole or in part, the request for a Contested Case Hearing.

**JURISDICTION**

2. The MPCA is authorized and required to administer and enforce laws relating to the pollution of the air and water of the state. Minn. Stat. chs. 115 and 116.
3. The MPCA has authority to issue coverage under the General NPDES/SDS Permit and to rule on the contested case hearing request on the General NPDES/SDS Permit. Minn. Stat. chs. 115 and 116 and Minn. R. chs. 7000, 7001, 7009, and 7020.
4. Under the federal Clean Water Act, the MPCA is delegated the authority from U.S. Environmental Protection Agency (EPA) to issue NPDES permits. 33 U.S.C. §1342; Minn. Stat. § 115.03, subd. 5.

**DESCRIPTION OF THE PROJECT**

5. Dollymount Dairy proposes to construct a confined animal feeding operation in Section 4 of Dollymount Township, Traverse County. The proposed Facility consists of total confinement dairy barns to house a total of 7,350 animal units (AU). Manure produced at the Facility will be scraped periodically to a manure transfer pipe within the barns where it will be transferred to the anaerobic digester. The anaerobic digester will process the manure, remove the bio-gas created during the

digestion process, and use the bio-gas to create electricity via bio-gas combustion engines. The manure will leave the anaerobic digester where it will then enter mechanical manure solids separators where the manure solids are removed, stored, and re-used as bedding material for the animals. Following the manure solids separation process, the remaining liquid fraction of the manure will enter the earthen lined manure storage basins. The manure will first enter a bio-solids crusted or straw covered settling basin where final solids settling will occur before the manure is allowed to enter one of the two high density polyethylene (HDPE) covered long-term manure storage basins. The proposed facility will also have an asphalt feed storage area with an associated leachate and contaminated runoff collection system that conveys said wastewaters to a clay-lined earthen storage basin located adjacent to the manure storage basins. The wastewaters generated from the feed storage area will be periodically irrigated onto surrounding cropland.

### PROCEDURAL HISTORY

6. Pursuant to Minn. R. 4410.4300, subp. 29, an EAW was prepared by MPCA staff on the proposed Project. Pursuant to Minn. R. 4410.1500, the EAW notice of availability was published in the *EQB Monitor* on April 20, 2009, and was distributed to the EQB mailing list and other interested parties.
7. A news release was provided to news media in Pipestone, Stevens, Pope, Jackson, Kandiyohi, Wilken, Douglas, Big Stone, Clay, Lincoln, Swift, Chippewa, Lyon and Murray Counties on April 20, 2009. In addition, the EAW was available for review on the MPCA Web site at <http://www.pca.state.mn.us/news/eaw/index.html> on April 20, 2009.
8. The public comment period for the EAW began on April 20, 2009, and ended on May 20, 2009. During the 30-day comment period, the MPCA received 11 comment letters and one request for a contested case hearing on the proposed issuance of coverage under the general NPDES/SDS Permit.
9. The MPCA prepared responses to comments (Responses to Comments) received during the public comment period associated with the environmental review process. Comment letters received (*see* Attachment 3) are part of the Findings of Fact for the environmental review and decision on the need for an EIS and are hereby incorporated by reference. The MPCA Responses to Comments for the Findings of Fact for the environmental review and decision on the need for an EIS and are hereby incorporated by reference (*see* Attachment 4).
10. The MPCA Citizens' Board issued a negative declaration on the need for an environmental impact statement at the July 28, 2009 board meeting, thereby completing the environmental review process as required prior to permit issuance.

### CONTESTED CASE HEARING REQUEST

11. The MPCA received one timely request for a Contested Case Hearing on the proposed issuance of coverage under the General NPDES/SDS Permit to Dollymount Dairy. The request for the contested case hearing is hereby incorporated by reference (Attachment 3, letter no. 3) to these findings.
12. The MPCA's decision whether to grant the petition for a Contested Case Hearing is governed by Minn. R. 7000.1900, subp. 1, which states:

Subpart 1. **Board or commissioner decision to hold Contested Case Hearing.** The board or commissioner must grant the petition to hold a Contested Case Hearing or order upon its own motion that a Contested Case Hearing be held if it finds that:

- A. there is a material issue of fact in dispute concerning the matter pending before the board or commissioner;
  - B. the board or commissioner has the jurisdiction to make a determination on the disputed material issue of fact; and
  - C. there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a Contested Case Hearing would allow the introduction of information that would aid the board or commissioner in resolving the disputed facts in making a final decision on the matter.
13. In order to satisfy the first requirement, Minn. R. 7000.1900, subp. 1(A), the hearing requester must show there is a material issue of fact in dispute as opposed to a disputed issue of law or policy. A fact is material if its resolution will affect the outcome of a case. *O'Malley v. Ulland Brothers*, 540 N.W.2d 889, 892 (Minn. 1996)
  14. In order to satisfy the second requirement, Minn. R. 7000.1900, subp. 1(B), the requester must show that the MPCA has jurisdiction or authority to make a determination on the disputed issues of material fact. "Agencies are not permitted to act outside the jurisdictional boundaries of their enabling act." *Cable Communications Board v. Nor-West Cable*, 356 N.W.2d 658, 668 (Minn. 1984). Therefore, each issue in the contested case request has to be such that it is within the MPCA's authority to resolve.
  15. Finally, under Minn. R. 7000.1900, subp. 1(C), the requester has the burden of demonstrating there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the MPCA in making a final decision on the matter. *In the Matter of Solid Waste Permit for the NSP Red Wing Ash Disposal Facility*, 421 N.W.2d 398, 404 (Minn. Ct. App. 1988). To do so, the requester must demonstrate that a hearing would allow for the introduction of new information that would be helpful to the MPCA in reaching a final decision.

#### **THE MPCA FINDINGS WITH RESPECT TO THESE CRITERIA**

Issue 1: Whether 40 CFR § 122.4(i) prohibits issuance of a permit to a new source that will cause or contribute to the impairments within impaired waters under the Clean Water Act.

16. First, the question of whether 40 CFR § 122.4(i) precludes the MPCA from issuing coverage under the General NPDES/SDS Permit to Dollymount Dairy is a question of law, not a question of fact. As a result, this is not an issue that is appropriate for resolution through a contested case hearing.
17. Second, this issue fails to meet the standard for granting a contested case hearing because the petitioner fails to identify any particular aspect of the proposed project that will cause the project not to comply with either the standards established in the applicable General NPDES/SDS Permit, or in the state or federal rules applicable to manure application. As a result, the petitioner has failed to show there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the

board or commissioner in resolving the disputed facts in making a final decision on the matter. Instead, the petitioner appears to be challenging the statutes and rules that allow manure application, or the conditions in the General NPDES/SDS Permit. A contested case hearing on this project is not appropriate for resolution of any issues that petitioner may have with these existing authorities. If the petitioner wishes to challenge the rules, the petitioner must do so in an appropriate forum. See Minn. Stat. § 14.44 (2008) (challenges to rules must be brought at the court of appeals). If the petitioner wishes to challenge the General NPDES/SDS Permit, the petitioner must do so at the appropriate time and in the appropriate manner. See Minn. R. 7001.0130.

18. Although it is not necessary to address the request for a contested case hearing on the issue, the MPCA does not disagree with the petitioner that under 40 C.F.R. § 122.4(i) (2008), a National Pollutant Discharge Elimination System (NPDES) Permit may not be issued for a new source when its discharge will cause or contribute to the impairment of waters within impaired status under the Clean Water Act. The proposed Dollymount Dairy has been designed and will be operated to meet the “no discharge” effluent limit imposed by 40 C.F.R. § 412.31 (a). All manure, stormwater, and process wastewater from the production site will be contained and land applied according to an approved Manure Management Plan (MMP) and Minn. R. 7020.2225. Manure and stormwater storage basins have been designed and will be constructed to meet applicable seepage standards outlined in Minn. R. 7020.2100, subp. 3. Moreover, as a matter of law, agricultural stormwater runoff, including that from manure land application sites, is not a “discharge” as that term is used in 40 C.F.R. § 122.4(i). (*See, e.g.* 40 C.F.R. §§ 122.3(e) and 122.23(e)) As a result, the MPCA finds that the facility will not be discharging treated or untreated liquid manure to an impaired waterway.

Issue 2: Land application of manure will introduce thousands of pounds of phosphorus into impaired waters in the Red River of the North basin.

19. The MPCA does not dispute that the Facility, if permitted, will land apply thousands of pounds of phosphorus each year in watersheds that include impaired waters. However, this activity will take place in compliance with rules and subject to the limits of the General NPDES/SDS Permit that are designed to ensure that discharges to waters do not occur. As noted above, if the petitioner wishes to challenge the rules, the petitioner must do so in an appropriate forum. See Minn. Stat. § 14.44 (2008) (challenges to rules must be brought at the court of appeals). If the petitioner wishes to challenge the General NPDES/SDS Permit, the petitioner must do so at the appropriate time and in the appropriate manner. See Minn. R. 7001.0130.
20. To the extent that this issue can be viewed as related to phosphorus levels associated with this particular proposed dairy operation, petitioner has failed to support his petition with information sufficient to enable the MPCA to conclude there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the Board or commissioner in resolving the disputed facts in making a final decision on the matter.
21. The record in this matter establishes that the Project proposer has prepared a MMP that includes information on expected phosphorus levels in manure produced at the Dollymount facility, phosphorus levels in soils in the manure management areas, and a planned schedule for manure

application and crop rotation that is based on accepted assumptions of crop nutrient uptake. There is no information in the record, or in petitioner's contested case request, that demonstrates that the information in these documents is in error, or identifies appropriate changes.

22. A majority of the phosphorus in manure is contained within the solids portion of the manure. The proposed Facility will remove solids from the manure for re-use as bedding material through the use of mechanical solids separators, thereby reducing the phosphorus content of the manure before it is land applied. Typical dairy manure has approximately 15 pounds of phosphorus per thousand gallons of manure. In contrast, Dollymount Dairy's manure is expected to contain only 6 to 7 pounds of phosphorus based on the performance of a similar manure processing and handling system at Riverview Dairy.
23. Soil tests conducted in the manure application acreage generally show that the soils have low to medium phosphorus levels. As a result, it would be expected that crop production would require the application of phosphorus as part of necessary nutrient for crop production. As a result, it is unlikely that these fields will be "overloaded" with phosphorus that will then be subject to discharge.
24. The MMP developed for this Project indicates that the planned rate of application predominately provides for only 6 pounds of phosphorus in excess of typical crop removal rates. Furthermore, the MMP developed indicates that corn grain will be harvested when actually corn silage will be the main crop, meaning that not only is the grain portion of the corn removed, the entire plant is removed as well. Although this practice has little to no effect on the nitrogen needs of the corn crop, and therefore does not impact the MMP greatly, it does increase the phosphorus uptake of the corn plant. The MMP currently identifies a yield goal of 180 bushels per acre (bu/acre) for the corn crop, which is approximately equivalent to a 20 tons per acre corn silage harvest. The MMP correctly illustrates that a corn crop, when harvested solely for grain, utilizes approximately 61 pounds per acre (lbs/acre) of phosphorus. However, when a corn silage crop is harvested, as will be the practice for the proposed Facility, the crop will utilize 68 lbs/acre of phosphorus. Therefore, as the planned application rate of phosphorus is 67 lbs/acre, it is anticipated that all the phosphorus applied will be removed by the crop grown, eliminating concerns of phosphorus build-up within the manure application acreage.
25. Finally, it is important to recognize that all of the fields that are designated for manure application are currently in row-crop production that will require nutrient application of some kind, whether that is commercial fertilizers or manure. The Project's land application of manure will not introduce more phosphorus than is already present in the Red River of the North basin; it will simply replace the nutrients that have historically been applied via commercial fertilizers.
26. The petitioner has failed to show there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the Board or commissioner in resolving the disputed facts in making a final decision on the matter

Issue 3: Manure storage areas and land application sites are subject to recurrent runoff and/or flooding and have been previously identified as a pollution hazard.

27. The petitioner's third issue fails to satisfy the requirements to grant a contested case hearing because the MPCA does not disagree with the petitioner that certain acres identified for manure application are in areas that are subject to periodic short term flooding. There is no dispute about this fact. However, the petitioner has failed to submit any information in support of the argument that this flooding represents a pollution hazard.
28. The MPCA does not agree that the area identified for construction of the manure storage basin is in a recurrent flooding area. The proposers of the Project have indicated that they, themselves, or a close relative, have lived immediately south of the proposed Dollymount Dairy site for more than 25 years and have not experienced a flood event that has adversely impacted the parcel of land where the dairy is proposed to be located. During a sizable spring flooding event this year (2009), the road immediately south of the proposed dairy site was not overtopped by water nor did the parcel of land upon which the proposed dairy would be located experience excessive flooding or water accumulation.
29. The design of the Facility will also help alleviate concerns of impacts to the feedlot or manure storage basins in the event of an overland flooding event. The proposed design requires the height of the basin berm to be equal to the elevation of the access road immediately south of the proposed Facility site. The Facility design also includes impermeable HDPE plastic covers on the two larger manure storage basins at the Facility. These covers will prevent potential flood water from accessing the manure held within those structures. In addition, the proposed anaerobic digester proposed will have a sealed concrete cover that will also prevent flood waters from accessing the manure held within the digester. According to the engineers who designed the basins, there will not be a discharge from the Facility during flooding events of the 100-year magnitude.
30. The feedlot and manure storage area is not located in the 100-year floodplain identified by Federal Emergency Management Agency (FEMA), and, as discussed above, is further protected from flooding by its engineering design. As such, its location conforms to the location standard in Minn. R. 7020.2005, subp. 1.
31. In framing this issue for a contested case, the petitioner appears to argue that the flooding of the manure management acres will cause a pollution hazard. However, petitioner has failed to support his petition with information sufficient to enable the MPCA to conclude there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the Board or commissioner in resolving the disputed facts in making a final decision on the matter. The record in this matter supports the conclusion that even though flooding is a fact of life in the Project area, it does not represent a "pollution hazard" because of the following factors.
32. First, the MMP developed for this Project indicates that the planned rate of application predominately provides for only 6 pounds of phosphorus in excess of typical crop removal rates. Furthermore, the MMP has been developed indicating that corn grain will be harvested when actually corn silage will be the main crop, meaning that not only is the grain portion of the corn removed, the entire plant is removed as well. Although this practice has little to no effect on the nitrogen needs of the corn crop, and therefore does not impact the MMP greatly, it does increase the

phosphorus uptake of the corn plant. The MMP currently identifies a yield goal of 180 bu/acre for the corn crop, which is approximately equivalent to a 20 ton/acre corn silage harvest. The MMP correctly illustrates that a corn crop, when harvested solely for grain, utilizes approximately 61 lbs/acre of phosphorus. However, when a corn silage crop is harvested, as is the practice for the proposed facility, the crop will utilize 68 lbs/acre of phosphorus. Therefore, as the planned application rate of phosphorus is 67 lbs/acre, it is anticipated that all the phosphorus applied will be removed by the crop grown, eliminating concerns of phosphorus build-up within the manure application acreage.

33. Second, the acreage identified in the MMP for land application is predominately in a corn and soybean rotation, along with some sugar beets, with very little acreage in a continuous corn scenario. Thus, even if a minimal amount of phosphorus were to remain following crop harvest it would be easily utilized by the crop grown the following year, as manure applications will not occur in consecutive years.
34. Third, the proposed Facility plans to apply the vast majority of the manure that it produces by knife injection in the fall of the year. Studies have shown that knife injection is a more environmentally desirable method of manure application than other land application methods including surface application without incorporation. This method was selected in part because knife-injected manure will assimilate quickly into the soil profile in comparison to other land application methods. As a result of the more effective assimilation of manure nutrient into the soil, a large part of the manure nutrients will be bound up into the organic portion of the soil during the fall such that they will not be mobilized in the spring when flooding is most common. The organic nutrients become less prone to mobilization by wind and/or water than inorganic nutrients commonly applied as commercial fertilizer. Manure applications have also been shown to increase soil tilth, a property of soil that describes its ability to retain nutrients.
35. Fourth, since flooding is most likely to occur in the spring or early summer and manure application will occur in the fall, there is a lower probability of properly applied manure nutrients becoming mobilized by seasonal storm or flood waters. The proposed method of knife injection places the manure beneath the soil surface. As a result, there is very limited contact of any nutrients with flood waters as the waters quickly pass over the soil surface thereby nearly eliminating the potential of nutrients being dissolved by the passing flood waters and carried with them as they enter the streams and rivers of the area. Additionally, dairy manure has roughly 50 percent of its nutrients in the organic form, which will require conversion by soil microbes to the more mobile inorganic form in order for it to be available to the crops throughout the year. The microbes that perform this conversion are largely inactive at soil temperatures below 50 degrees Fahrenheit, which will be the predominate soil temperature during much of the manure application period, throughout the winter, and during the spring overland flooding time period.
36. Finally, it is important to recognize that all of the fields that are designated for manure application are currently in row-crop production that will require nutrient application of some kind, whether that is commercial fertilizers or manure. The land application of manure by the Project will not be introducing more phosphorus than is already present in the Red River of the North basin, but rather simply replacing the nutrients that have historically been applied via commercial fertilizers. Taking

into consideration the above-mentioned properties of land applied manure, it is possible that manure nutrient applications will have less impact to surface waters than commercial fertilizers that are fall applied, as is the current practice.

Issue 4: Runoff and leaching from the manure application sites will contribute to the water impairments.

37. This issue is not distinguishable from Issues 1-3 and a contested case hearing should not be granted for the reasons stated above.

**CONCLUSIONS OF LAW**

38. Based on Minn. R. 7000.1900, the MPCA Citizens' Board and Commissioner have jurisdiction to decide whether a Contested Case Hearing should be granted or denied.
39. The Contested Case Hearing should be **denied**.
40. Any Finding more properly considered a conclusion shall be considered a conclusion. Any Conclusion more properly considered a Finding shall be considered a Finding.

**ORDER**

The petitions for a Contested Case Hearing are hereby **denied**.

**IT IS SO ORDERED**

  
\_\_\_\_\_  
Commissioner Paul Eger  
Chair, Citizens' Board  
Minnesota Pollution Control Agency

7/29/09  
\_\_\_\_\_  
Date