MINNESOTA POLLUTION CONTROL AGENCY

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May 22, 2023

TO: INTERESTED PARTIES

RE: Luke and Melissa Stevens Swine Facility

The Minnesota Pollution Control Agency (MPCA) has approved the Findings of Fact, Conclusions of Law, and Order for a Negative Declaration (FOF) on the need for an Environmental Impact Statement on the Luke and Melissa Stevens Swine Facility. The FOF document concludes that this project does not have the potential for significant environmental effects. The decision for a Negative Declaration completes the state environmental review process under Environmental Quality Board rules, Minn. R. ch. 4410. Final governmental decisions on permits or approvals for the project may now be made.

The MPCA appreciates comments submitted on the Environmental Assessment Worksheet (EAW). The comments were considered by MPCA staff during the environmental review process and responses to these comments are provided in the FOF.

Interested parties can review the FOF and the EAW documents at the following locations: the MPCA offices in St. Paul and the Hennepin County Library at 300 Nicollet Mall, Minneapolis. Interested parties can also view the documents on MPCA's website at https://www.pca.state.mn.us/regulations/projects-under-mpca-review. Please contact the MPCA's St. Paul office at 651-757-2728 for copies of these documents.

STATE OF MINNESOTA MINNESOTA POLLUTION CONTROL AGENCY

IN THE MATTER OF THE DECISION ON THE NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED LUKE & MELISSA STEVENS FACILITY PROJECT FRIENDSHIP TOWNSHIP, YELLOW MEDICINE COUNTY, MINNESOTA FINDINGS OF FACT CONCLUSIONS OF LAW AND ORDER

Pursuant to Minn. Ch. 4410, the Minnesota Pollution Control Agency (MPCA) staff prepared and distributed an Environmental Assessment Worksheet (EAW) for the proposed Luke & Melissa Stevens Facility Project. Based on the MPCA staff environmental 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.

FINDINGS OF FACT

Project Description

- 1. Luke and Melissa Stevens (Stevens) propose to construct a swine finishing feedlot in Section 36 Friendship Township, Yellow Medicine County (Project).
- 2. The Project consists of building the following:
 - Proposing construction of a 336'x122'-7" grow/finish confinement swine facility capable of housing 4,800 swine between 55-300 pounds (1440 Animal Units). Manure generated at the facility will be stored in an 8-foot-deep underfloor concrete liquid manure storage area.
 - One new well utilizing 2 million gallons per year for livestock watering.
- 3. This is a new swine feedlot operation.
- 4. Stevens plans to begin and complete construction in 2023.
- 5. Stevens's actual construction dates are dependent on completion of the environmental review process, issuance of the Minnesota Department of Natural Resources (DNR) Water Appropriation Permit and the State of Minnesota (Feedlot Permit) from the MPCA.
- 6. The Project will generate approximately 2,025,971 gallons of manure annually.
- 7. Manure will be applied on land both owned and not owned by Stevens. The manure will be retained as well as transferred to adjacent land available for manure application. See EAW and EAW Appendices A.
- 8. Stevens will follow the MPCA approved manure management plan (MMP).
- 9. Stevens has applied for coverage under the State of Minnesota General Animal Feedlot National Pollutant Discharge Elimination System (NPDES) permit (MNG442162) (hereafter referred to as Feedlot Permit).

Procedural History

10. An EAW is a brief document designed to provide the basic facts necessary for the Responsible Governmental Unit (RGU) to determine whether an Environmental Impact Statement (EIS) is

required for a proposed project or to initiate the scoping process for an EIS (Minn. R. 4410.0200, subp. 24). The MPCA is the RGU for this Project.

- Minn. R. 4410.4300, requires preparation of an EAW because the Project involves construction of an animal feedlot facility with a capacity of 1,000 animal units or more or the expansion of an existing facility by 1,000 animal units or more if the facility is not in an area listed in item B (Animal Feedlots – Subp. 29. A).
- 12. The MPCA provided public notice of the Project as follows:
 - A. The Environmental Quality Board (EQB) published the notice of availability of the EAW for public comment in the *EQB Monitor* on March 28, 2023, as required by Minn. R. 4410.1500.
 - B. The EAW was available for review on the MPCA website at: <u>www.pca.state.mn.us/eaw</u>.
 - C. The MPCA provided a news release to media in southern Minnesota, and other interested parties, on March 28, 2023.
 - D. Stevens's application for permit coverage under the Feedlot Permit was open for public comment from March 28, 2023, through April 28, 2023.
- 13. During the 30-day comment period ending on April 28, 2023, on the EAW, the MPCA received comments from the US Army Corps of Engineers and one comment from citizens.
- 14. The list of comment letters received during the 30-day public comment period are included as Appendix A to these Findings.
- 15. The MPCA prepared written responses to the comments received during the 30-day public comment period. These responses are included as Appendix B to these Findings.

Criteria for Determining the Potential for Significant Environmental Effects

- 16. The MPCA shall base its decision on the need for an EIS on the information gathered during the EAW process and the comments received on the EAW (Minn. R. 4410.1700, subp. 3). The MPCA must order an EIS for projects that have the potential for significant environmental effects (Minn. R. 4410.1700, subp. 1). 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. Type, extent, and reversibility of environmental effects.
 - B. Cumulative potential effects. The 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.

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 proposer, including other ElSs.

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

Type, Extent, and Reversibility of Environmental Effects

- 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.
- 18. The types of impacts that are reasonably expected to occur from the Project include the following:
 - Surface water and groundwater quality
 - Groundwater appropriation
 - Air quality related to hydrogen sulfide, ammonia, and odor emissions
 - Greenhouse Gas Emissions

With respect to the extent and reversibility of impacts that are reasonably expected to occur from the Project, the MPCA makes the following Findings:

Surface Water and Groundwater Quality

- 19. The EAW outlines construction and operational requirements used to comply with the water quality discharge standards of Minn. R. pt. 7020.2003 and the Feedlot Permit. This includes the requirement to design, construct, operate and maintain the animal feedlot to contain all contaminated runoff and the direct precipitation up to the volume from a 25-year 24-hour storm event.
- 20. Minn. R. 7020.2015 and the Feedlot Permit requires all animals at the animal feedlot facility have no direct access to surface waters.
- 21. Storage structures for liquid manure will meet the design criteria of Minn. R. 7020.2100. Additionally, a professional engineer licensed in the state of Minnesota is required to design and oversee construction of liquid manure storage structures.
- 22. As required by Minn. R. 7020.2100, a perimeter tile will be installed around the liquid manure storage area to protect the liner of the structure from impacts due to water table fluctuation. The perimeter tile system will have access for visual observation.
- 23. Minn. R. 7020.2225 and the Feedlot Permit, require Stevens to manage all manure in accordance with a Manure Management Plan (MMP) approved by the MPCA. The MMP describes how manure generated by the project will be applied in a way that meets all rules and regulations, and thus protects surface water and groundwater quality. The MMP for the project requires that total nutrients (manure and other sources) be applied in accordance with the feedlot permit and Minn. R. 7020.2225.
- 24. To minimize the potential for nitrate leaching into the groundwater at the manure application sites, manure generated by the Project must not exceed nitrogen-based agronomic rates for the type of crop grown. Additionally, manure application must include nitrogen BMPs based on timing of application as required by the NPDES permit. Nitrogen contributions from all sources, including commercial fertilizers, must be accounted for when determining the application rate of manure. The total of nitrogen from all sources cannot exceed the agronomic needs of the crop.

- 25. Manure application rates may also be limited when soil phosphorous test results exceed levels listed in Minn. R. 7020.2225 and the Feedlot Permit. Phosphorous management is required in special protection areas when soil phosphorous test results exceed 21 ppm Bray 1 or 16 ppm Olson. Additional NPDES permit restrictions apply to fields testing exceedingly high for soil phosphorus.
- 26. To minimize impacts from surface runoff at the manure application sites, Stevens must observe setbacks to waters, open tile intakes, sinkholes, mines, quarries, and wells as specified in Minn. R. 7020.2225 and the Feedlot Permit. Where a county also has setback requirements, for land application of manure, Stevens must follow the most restrictive of the state or county setback requirements.
- 27. The Feedlot Permit requires transport of manure in a manner to prevent it from leaking or spilling on to public roadways. If manure leakage or spillage does occur, it must be cleaned up and land applied in accordance with Minn. R. 7020.2010 and the feedlot permit.
- 28. Stevens has identified 1027 acres of cropland available for manure application. Based upon the approved MMP, this is adequate for land application of the manure at agronomic rates.
- 29. The MMP for the project indicates all manure applications to fields will be injected or incorporated within 24 hours, which further limits potential impacts due to runoff from the land application sites. This also limits the potential for bacterial transport from the manure application sites to waters.
- 30. When ownership of manure generated by the Project is transferred to a third-party recipient, the Feedlot Permit requires Stevens, prior to or at the time of manure land application, to provide the manure recipient with the most current manure nutrient analysis. The recipient of the manure must ensure the agronomic rates of the crop are not exceed by the application of nutrients from manure, including contributions from any other source. The manure recipient must also apply manure in accordance with required setbacks and other requirements of Minn. R. 7020.2225.
- 31. The recipient of the manure must follow the requirements of Minn. R. 7020.2225. This includes application of nutrients from manure and other sources at agronomic rates observing required setbacks and keeping record of the manure application.
- 32. If a Commercial Animal Waste Technician (CAWT) is hired to spread the manure generated by the Project, they must keep records of the quantity and nutrient content of the manure applied as well as the location and rate of application. These records must be provided back to Stevens within the 60-days of application.
- 33. Stevens must keep records of manure application activities for the six most recent years. The records must include the amount and nutrient content of manure, location where the manure is applied, and the rate of application.
- 34. The MPCA finds that the measures specified above will prevent or mitigate potential water quality impacts.
- 35. The MPCA does not reasonably expect significant adverse impacts to water quality, however, if they were to occur, Stevens must modify the operation and management of the Project. The MPCA would require modification of the Feedlot Permit coverage for those items found to cause pollution of waters, including modification of the MMP, for impacts from land application, and the impacts to waters would be reversed.
- 36. The MPCA finds that information presented in the EAW and other information in the environmental review record are adequate to assess potential impacts to the quality of surface water and groundwater that are reasonably expected to occur from the Project.

37. The MPCA finds the Project, as proposed, does not have the potential for significant environmental effects based on the type, extent and reversibility of impacts related to surface water and groundwater quality, which are reasonably expected to occur.

Groundwater Appropriation

- 38. The Project would result in the feedlot's water use of 2 million gallons per year, which is a total consumption of 50 million gallons over 25 years.
- 39. This level of water use will require Stevens to obtain a DNR Water Appropriation Permit for the Project because it is over the DNR's permitting threshold of 1 million gallons per year.
- 40. The DNR is the permitting authority for appropriating waters of the state in Minnesota. The DNR Water Appropriations Permit allows for a reasonable use of water if the use does not negatively impact surrounding wells or other water resources.
- 41. The purpose of the Water Appropriation Permit is to ensure water resources are managed so that adequate supply is available for long-range seasonal requirements for domestic, agricultural, fish and wildlife, recreational, power, navigational, and water quality.
- 42. The DNR Water Appropriation Permit 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 the DNR finds a commercial operator is causing interference, the operator must correct it.
- 43. Unauthorized pumping or use of the well or other water resources is subject to enforcement under Minn. Stat. § 103. Upon completion of an investigation, a permit for water appropriation may be limited, amended, or denied in accordance with applicable laws and rules for the protection of the public interests and the sustainability of Minnesota's water resources.
- 44. Due to the DNR oversight and permitting of water appropriations, the MPCA does not expect significant adverse impacts to water appropriation. However, if the DNR determines there is well interference based on concerns or well interference claims, the operator must fix the causes of the interference. Thus, the impacts to water appropriations would then be reversed. The MPCA finds that any water appropriation impacts that may occur from the Project are reversible.
- 45. The MPCA finds that the Project, as proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of impacts related to water appropriations that are reasonably expected to occur.

Air Quality

- 46. Stevens conducted air dispersion modeling to estimate the atmospheric concentrations of hydrogen sulfide, ammonia, and the intensity of odorous gases at the Project property lines and nearest neighbors.
- 47. Stevens's air modeling used the American Meteorological Society Regulatory Model (AERMOD) developed by the American Meteorological Society and the U.S. Environmental Protection Agency. The model evaluated the air quality impacts of the Project. AERMOD is a widely accepted air dispersion model, which uses conservative assumptions to predict air quality.
- 48. The gaseous emissions from the proposed facility are mechanically ventilated from the building by means of wall mounted exhaust fans and pit cover fans.

Air Quality Related to Hydrogen Sulfide Emissions

Minnesota Ambient Air Quality Standards (MAAQS)

- 49. The air modeling predicts that the Project will comply with the 30 parts per billion (ppb) hydrogen sulfide MAAQS. Under the hydrogen sulfide MAAQS, the third exceedance of the MAAQS within any 5-day period is a violation. The air modeling demonstrates compliance when the high-third-high hydrogen sulfide concentration (added to background concentration) for any 5-day period at each property-line receptor is less than 30 ppb.
- 50. The air modeling predicts that the Project emissions alone will result in a maximum property-line hydrogen sulfide concentration of 7.6 ppb. The estimated ambient air concentration for hydrogen sulfide in the Project area is 17 ppb. The total (Project emissions plus existing background) hydrogen sulfide concentration is predicted to be 24.6 ppb at the Project's property lines.

Sub-Chronic Inhalation Health Risk Value (iHRV)

- 51. The air modeling predicts that the Project will not exceed the 10 micrograms per cubic meter $(\mu g/m^3)$ subchronic (13-week) hydrogen sulfide iHRV at neighboring residences. iHRVs are concentrations of chemicals emitted to air that are unlikely to pose a significant risk of harmful effects when humans are exposed to those concentrations over a specified period.
- 52. The air modeling predicts that the Project emissions alone will result in a maximum monthly hydrogen sulfide concentration of $0.48 \ \mu g/m^3$ at the nearest residence. The estimated hydrogen sulfide background concentration in the Project area is $1.0 \ \mu g/m^3$. The total Project emissions plus existing background H2S concentration in the air is predicted to be $1.48 \ \mu g/m^3$. Note that while the iHRV is for a 13-week period, AERMOD is not capable of averaging concentrations for that time-period, so a monthly averaging period was used instead. The monthly averaging period is acceptable because it produces a more conservative or protective prediction than the 13-week period.
- 53. Based on the air modeling results discussed above, the MPCA finds that hydrogen sulfide emissions expected from the Project do not present the potential for significant environmental effects.

Air Quality Related to Ammonia Emissions

Acute iHRV

- 54. The air modeling predicts that the Project will not exceed the 3,200 μ g/m³ (1-hour) acute ammonia iHRV at the Project's property-line.
- 55. The air modeling predicts that the Project emissions alone will result in a maximum hourly propertyline ammonia concentration of 148 μ g/m³. The estimated ammonia background concentration in the Project area is 203 μ g/m³. The maximum total (Project emissions plus existing background) property-line ammonia concentration is predicted to be 351 μ g/m³.

Chronic iHRV

- 56. The air modeling predicts that the Project will not exceed the 80 μ g/m³ (1-year) chronic ammonia iHRV at neighboring residences to the Project site.
- 57. The air modeling predicts that the Project emissions alone will result in a maximum 1-year time averaged ammonia concentration of $1.99 \ \mu g/m^3$ at the neighboring residences. The estimated ammonia background concentration in the Project area is $5.72 \ \mu g/m^3$. The maximum total (Project emissions plus existing background) ammonia concentration at the nearest residences is predicted to be $7.71 \ \mu g/m^3$.

58. Based on the air modeling results discussed above, the MPCA finds that ammonia emissions expected from the Project do not present the potential for significant environmental effects.

Air Quality Related to Odor Emissions

- 59. Although the state of Minnesota has not established ambient air quality standards to regulate odor, Stevens completed air dispersion modeling for odor. The modeled maximum hourly odor intensity of 29 odor units per cubic meters (OU/m³) demonstrate the proposed facility will exceed the "Very Faint" odor strength threshold at the feedlot's effective property line. The "Faint" odor strength threshold of 72 OU/m³ is not exceeded at the proposed facility's effective property line. This predicted odor intensity is considered "faint" as defined by the air modeling report used in the EAW for this Project (Attachment 16 of EAW).
- 60. The modeled maximum hourly odor intensity, at the nearest residences, is 6 OU/m³. This predicted odor intensity is "no odor."
- 61. Stevens has submitted an air emissions and odor management plan to the MPCA with its Feedlot Permit application. The plan includes measures that Stevens will take to minimize the generation of odors from its proposed feedlot and from associated manure application activities. Stevens will use below ground manure storage pits and immediately inject manure into the soil as its manure application method to minimize odors. Stevens has also taken other measures as listed in item 6.B. of the EAW to further reduce odors.
- 62. Based on the modeling results discussed above, the MPCA finds that odor at Stevens's property lines and nearby residences does not present the potential for significant environmental effects.

Summary of Air Quality Impacts

- 63. The MPCA expects the Project to meet applicable air quality standards and criteria.
- 64. With respect to the reversibility of air quality impacts expected to occur from the Project, air emissions from the Project will continue while it remains in operation and would cease only if the Project were temporarily or permanently closed.
- 65. If excessive air emissions or violations of the hydrogen sulfide MAAQS were to occur, or if Stevens exceeded iHRVs for hydrogen sulfide or ammonia, air quality impacts are likely to be correctable. The MPCA could initiate an investigation and require Stevens to make operation and maintenance changes. Therefore, the MPCA finds that any impacts on air quality that may occur from the Project are reversible.
- 66. The MPCA finds that information presented in the EAW and other information in the environmental review record are adequate to assess the impacts on air quality that are reasonably expected to occur because of the Project.
- 67. The MPCA finds the Project, as 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.

Greenhouse Gas Emissions

- 68. The MPCA considered GHG emission sources that are within the scope of the Project.
- 69. The Project will directly release GHG emissions, which can widely disperse within the atmosphere and which vary both in terms of their global warming potential and their persistence in the

atmosphere.

- 70. To provide a common unit of measure, the MPCA uses the individual global warming potential of methane and nitrous oxide to convert to carbon dioxide equivalency (CO₂e).
- 71. Using EPA emission factors, Scope 1 Construction Sources, Scope 1 Mobile Equipment Combustion, Scope 1 Stationary Equipment Combustion, and Scope 2 Fugitive Emissions, the Project will release 2083 tons per year (TPY) of CO₂e.
- 72. There are no Minnesota or National Ambient Air Quality Standards for GHGs.
- 73. Currently, there are no federal or Minnesota thresholds of GHG significance for determining impacts of GHG emissions from an individual project on global climate change.
- 74. In the absence of a threshold of GHG significance, the MPCA looks to existing regulation. Minn. R. 4410.4300, subp. 15(B), establishes a mandatory category requiring preparation of an EAW for stationary source facilities generating 100,000 TPY of GHGs. The purpose of an EAW is to assess environmental effects associated with a proposed project to aid in the determination of whether an EIS is needed. On the premise of GHG emissions, environmental review regulations establish 100,000 TPY as a "trigger" to prepare an EAW to aid in determining potential significant environmental effects. A reasonable conclusion is that the Project's GHG emissions below 100,000 TPY are not considered significant.
- 75. The MPCA finds that information presented in the EAW and other information in the environmental review record are adequate to assess potential GHG impacts that are reasonably expected to occur to and from the Project.
- 76. The MPCA finds the Project, as proposed, does not have the potential for significant environmental effects based on the type, extent and reversibility of impacts related to emissions of greenhouse gasses, which are reasonably expected to occur.

Cumulative Potential Effects

- 77. 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.
- 78. 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.
- 79. The EAW addressed the following areas for cumulative potential effects for the proposed Project:
 - Surface water and groundwater quality
 - Groundwater appropriation
 - Air quality
 - Greenhouse Gas Emissions

Surface Water and Groundwater Quality

- 80. The Project is in the Hawk-Yellow Medicine Watershed (HUC 07020004) within the Minnesota River Basin.
- 81. The land use in the region, including the Project location and manure application sites, is primarily row-crop agriculture with some pasture and non-cropped areas.
- 82. Minnesota's "Final Animal Agriculture Generic Environmental Impact Statement" (2002) and the University of Minnesota Agriculture Extension Program state that manure not only supplies nutrients but can also improve the biological and physical properties of soil, making it more productive and less erosive. Manure provides valuable organic matter to soil that improves soil tilth, aids in the retention of water and nutrients, and promotes growth of beneficial microorganisms. Manure, when properly used as part of a soil management program, improves soil quality, builds soil structure, and increases the level of soil organic matter.
- 83. Spring Creek is the closest listed impaired water body to the Project and its manure application site.
- 84. Spring Creek is within the Lower Spring Creek Watershed and listed as part of the Minnesota River-Yellow Medicine River Watershed TMDL. The closest impaired reach of Spring Creek to the proposed Project site is "AUID 07020004-777", approximately 1/2 mile straight south of the Project. The proposed manure application sites range in distance from directly adjacent to up to 2.2 miles away.
- 85. MPCA's 2023 impaired waters list identifies this reach of Spring Creek as being impaired for Aquatic Recreation and Aquatic Life due to Escherichia coli (E. coli) and Benthic macroinvertebrate bioassessments. Additional impairments for which a TMDL is underway or not yet developed include dissolved oxygen, fish bioassessments, and Benthic macroinvertebrate bioassessments.
- 86. A Total Maximum Daily Load (TMDL) for Spring Creek is approved for E. coli.
- 87. The MPCA published the Yellow Medicine River Watershed Biotic Stressor Identification Report in November 2013. The report studied the local stressors limiting the biotic communities in the Yellow Medicine Watershed. The report listed the following stressors as probable causes of stress to aquatic life: low dissolved oxygen, high phosphorus, high nitrates, high turbidity/total suspended solids, altered hydrology, lack of habitat, and pesticides.
- 88. Stevens will design and build the feedlot facility as a total confinement operation. This limits the potential for precipitation coming in contact the animals or manure generated at the facility and creating contaminated runoff.
- 89. All manure is stored within storage structures approved by the MPCA and meet the design requirements of Minn. Rule Chapter 7020, which limits the potential for impacts to surface or ground water quality. Stevens is required to examine any LMSA drain tile outlet monthly for water flow and signs of discoloration or odor in any water in the drain tile.
- 90. Minn. R. 7020.2003 and the Feedlot Permit prohibits discharge of manure, manure contaminated runoff, or process wastewater from the production area to waters of the state except when authorized by the permit as a result of extreme or chronic rainfall events. As a result, the discharge of manure or manure-contaminated runoff to waters of the state from the production area is not reasonably expected to occur.

- 91. All manure application must occur at agronomic rates and comply with Minn. R. ch. 7020, the Feedlot Permit and county setback requirements, as well as all other applicable federal, state, and local rules, whatever are the more restrictive.
- 92. Land application of manure from the Project will be done in accordance with the MPCA-approved MMP. The manure from the Project will be injected or immediately incorporated into the soil.
- 93. If a manure spill occurs, Stevens must comply with the Emergency Response Plan developed as part of the permit application process and incorporated into the Feedlot Permit. Minn. Statute 115.061 and the Feedlot Permit requires Stevens to report manure spills to the MN Duty Officer and requires all responsible parties to take immediate action to stop the discharge and recover the material.
- 94. Proper operation and management of the Project and adherence to appropriate manure land application practices in the MPCA-approved MMPs will limit the potential of manure and/or manure-contaminated stormwater runoff from impacting waters of the state.
- 95. Since the Feedlot Permit and MMPs require preventative measures to protect surface water and groundwater quality, the MPCA does not anticipate the Project will contribute to any potential adverse effect on water quality. Therefore, the MPCA finds that the Project is not expected to contribute significantly to adverse cumulative potential effects on water quality.

Groundwater Appropriation

- 96. The Project does not currently have a well. Stevens plans to drill a well for watering, washing, and all other daily water needs at the Project. Stevens is proposing the installation of a new water supply well for operational and livestock water needs. Stevens expects to use 2 million gallons annually, with total consumption of approximately 50 million gallons over 25-years.
- 97. Stevens has applied for a Well Construction Assessment Reference #: 2021-3867, EAW Attachment 12. At this time, no well has been installed and no pump test has been conducted. Once the well is installed, a water use appropriation permit must be applied for through the MPARS.
- 98. The purpose of the DNR permit program is to ensure management of water resources 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. If a well interference arises, the DNR has a standard procedure for investigating the matter. If the DNR determines that a commercial operator is causing the problem, the operator must correct it.
- 99. The MPCA finds that the Project is not expected to contribute significantly to adverse cumulative potential effect on water appropriation.

Air Quality

- 100. The MPCA evaluated cumulative potential effects on air quality by comparing the MAAQS for hydrogen sulfide, iHRVs for hydrogen sulfide and ammonia, and odor intensity thresholds with concentrations in the air predicted by air modeling.
- 101. The modeling analysis included the estimated emissions from the Project, emissions from nearby feedlots, and incorporated conservative background concentrations to account for other possible sources of emissions in the area. Stevens estimated air concentrations for these pollutants at the residences closest to the Project.

102. All modeled air pollutant concentrations for the Project were below the health-based criteria used in the analyses. Therefore, the MPCA finds that cumulative potential effects on air quality will not be significant in the Project area, and the Project will not contribute significantly to adverse cumulative potential effects on air quality.

Cumulative Effects – Summary

- 103. Based on information on the Project obtained from air modeling reports and Feedlot Permit application processes, information on water quality and groundwater appropriation presented in the EAW, and consideration of potential effects due to related or anticipated future projects, the MPCA does not expect significant cumulative effects from this Project.
- 104. The MPCA finds the Project, as proposed, does not have the potential for significant environmental effects related to cumulative potential effects that are reasonably expected to occur.

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

105. 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.

Unit of Government	Permit or Approval Required
MPCA	Feedlot Permit
DNR	Water Appropriation Permit
Yellow Medicine County	Conditional Use Permit

- 106. The following permits or approvals will be required for the Project:
- 107. **MPCA Feedlot Permit**. The MPCA requires Stevens to obtain a Feedlot Permit for the Project. The 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 Feedlot Permit.
- 108. **Construction Stormwater.** Construction stormwater requirements are incorporated by reference into the Feedlot NPDES Permit.
- 109. **DNR Water Appropriation Permit**. The Project does not currently have a well. Stevens is proposing the installation of a new water supply well for operational and livestock water needs. Stevens expects to use approximately 2 million gallons annually, with total consumption of approximately 50 million gallons over 25-years.
- 110. The Project would result in water use of over 2 million gallons per year, therefore a Water Appropriation Permit will be required for the Project.
- 111. State law requires a **Water Appropriations Permit** for users withdrawing more than 10,000 gallons of water daily, or 1 million gallons annually. Stevens applied to the DNR for a General Water Appropriation Permit on December 27, 2021.
- 112. The DNR Water Appropriation Permit ensures the well user manages water resources so adequate supply is available for long-range seasonal requirements for domestic, agriculture, fish and wildlife,

recreation, power, navigation, and water quality. State law establishes domestic use as the highest priority when water supplies are limited, and, when well interference occurs, the DNR follows a standardized procedure of investigation.

- 113. Yellow Medicine County Conditional Use Permit. Stevens is required to obtain all required building and conditional use permits required by local units of government to ensure compliance with local ordinances. The Conditional Use Permit addresses local zoning, environmental, regulatory, and other requirements needed to avoid adverse effects on adjacent land.
- 114. 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

- 115. 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.
- 116. Although not exhaustive, the MPCA reviewed the following documents as part of the environmental impact analysis for the Proposed Project:
 - Data presented in the EAW
 - Feedlot Permit application, with MMPs and attachments
 - Air Dispersion Modeling Report
 - Minnesota's "Final Animal Agriculture Generic Environmental Impact Statement" (2002) and
 - Permits and environmental review of similar projects
- 117. The MPCA also relies on information provided by Stevens, persons commenting on the EAW, staff experience, and other available information obtained by staff.
- 118. 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. No elements of the Project pose the potential for significant environmental effects.
- 119. 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.
- 120. The MPCA adopts the rationale stated in the attached Responses to Comments (Appendix B) as the basis for response to any issues not specifically addressed in these Findings.

CONCLUSIONS OF LAW

121. The MPCA has jurisdiction in determining the need for an EIS for this 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 Project.

- 122. The MPCA identified areas for potential significant environmental effects. The Project design and permits ensure Stevens will take appropriate mitigation measures to address significant effects. The MPCA expects the Project to comply with all environmental rules, regulations, and standards.
- 123. Based on a comparison of the impacts that are reasonably expected to occur from the Project with the criteria established in Minn. R. 4410.1700 subp. 7, the Project does not have the potential for significant environmental effects.
- 124. An EIS is not required for the proposed Luke & Melissa Stevens Swine Facility.
- 125. Any Findings that might properly be termed conclusions and any conclusions that might properly be termed Findings are hereby adopted as such.

ORDER

126. The Minnesota Pollution Control Agency determines that there are no potential significant environmental effects reasonably expected to occur from the Luke & Melissa Stevens Swine Facility and that there is no need for an Environmental Impact Statement.

IT IS SO ORDERED

Katrine Kessler

Katrina Kessler, Commissioner Minnesota Pollution Control Agency

June 6, 2023

Date

Findings of Fact Conclusions of Law and Order

APPENDIX A

Minnesota Pollution Control Agency

Luke & Melissa Stevens Swine Facility Environmental Assessment Worksheet (EAW)

LIST OF COMMENT LETTERS RECEIVED

1. Dan Reburn, Army Corps of Engineers, Letter received April 17, 2023

2. Skyler Sutherlin, Letter received April 22, 2023

RESPONSES TO COMMENTS ON THE EAW

1. <u>Comments by Dan Reburn, Army Corps of Engineers, Letter received April 17, 2023.</u>

Comment 1-1: The purpose of this letter is to inform you that based on the Luke and Melissa Stevens Swine EAW, a Department of the Army (DA) permit may not be required for your proposed activity where there is no discharge within an aquatic resource, including wetlands. Various portions of the project locations have hydric soils and are not clear if they would be considered wetland. An off-site or on-site review of wetland signatures or characteristics could assist in determining the presence of aquatic resources on-site.

Response: The site was reviewed by Brayden Anderson, Certified Wetland Professional for the Yellow Medicine SWCD. Mr. Anderson concluded there are no wetlands present. There are hydric soils on the site but there is no other evidence indicating wetlands. No wetlands are present on the National Wetland Inventory (NWI) map. A certified wetland determination was done on March 28th, 2022, by the Natural Resources Conservation Service (NRCS) where the entire field was determined to be prior converted/ No Wetland. Historic photos show the proposed site has been able to be planted every year from 1980-2000. The most recent imagery from 2021 on shows the area has continued to be planted and cropped and shows no other wetland characteristics.

Comment 1-2: In lieu of a specific response, please consider the following general information concerning our regulatory program that may apply to the proposed project. If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and arbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit. If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404.

Response: Comment noted.

2. Comments by Skyler Sutherlin, Letter received April 22, 2023.

Comment 2-1: Per the EPA methane is a greenhouse gas (GHG) 25 times more potent than CO2. The EAW for the project indicates that the project will result in significant methane release into the atmosphere. Methane output can be reduced by making adjustments to the feed that the animals consume, however per the EAW, the owners "do not own the pigs" and will not be able to control or adjust their diet.

Response: Methane release for the Stevens swine facility is calculated to be 1627 tons CO₂-e per year, with total greenhouse gas emissions calculated at 2083 tons CO₂-e per year. Currently, there are no federal or Minnesota thresholds of GHG significance for determining impacts of GHG emissions from an individual project on global climate change. In the absence of a threshold of GHG significance, the MPCA looks to existing regulation. Minn. R. 4410.4300, subp. 15(B), establishes a mandatory category requiring preparation of an EAW for stationary source facilities generating 100,000 TPY of GHGs. The purpose of an EAW is to assess environmental effects associated with a proposed project to aid in the determination of whether an EIS is needed. On the premise of GHG emissions, environmental review regulations establish 100,000 TPY as a "trigger" to prepare an EAW to aid in determining potential significant environmental effects. A reasonable conclusion is that the Project's GHG emissions below 100,000 TPY are not considered significant.

Comment 2-2: With the EAW's acknowledgment that Minnesota is one of the most rapidly warming states and that 30% of the state is expected to transition to a different biome by the end of the century, it would seem that there needs to be accountability at all levels for GHG emissions, and efforts to reduce and eliminate those emissions should be paramount for the preservation of the landscape.

Response: Comment noted.

Comment 2-3: It becomes difficult to take necessary measures to maintain our atmosphere and environment when the owners of a project attempt to evade culpability for one of the most impactful pollutants that will be emitted by their project. By continuing to allow the development of projects that emit GHG without checks and counters to these emissions, we are only increasing the pace of climate change and the destruction of our landscape.

Response: Comment noted.

Comment 2-4: The EAW also inadequately accounts for the secondary increase in GHG from the transportation of the animals from the contained feed operation to the slaughterhouse, and the GHG associated with slaughterhouse operations, warehouse overhead emissions, packaging production emissions, and then the tertiary transportation of the packaged product to the final point of sale location. It can be inferred that there are significant GHG emissions secondary and tertiary to (but directly caused by) the primary operation of the feedlot, which are left unaccounted for in this assessment, and which would not be produced if not for the operation of the feedlot.

Response: Scope 2 and 3 impacts were not required for this EAW at the time of submission. In the absence of a threshold of GHG significance, the MPCA looks to existing regulation. Minn. R. 4410.4300, subp. 15(B), establishes a mandatory category requiring preparation of an EAW for stationary source facilities generating 100,000 TPY of GHGs. It is not likely the addition of Scope 2 and 3 Emissions for the Project would result in total GHG emissions exceeding 100,000 TPY.

Findings of Fact Conclusions of Law and Order

Comment 2-5: With the advent of food sources that have minimal GHG emissions and which do not involve raising livestock (which is one of the primary sources of anthropogenic methane emissions), any community benefit of marginally increased meat production from this farm, and the marginal decrease in the need for artificial fertilizer application in the surrounding area cannot overcome the harm caused by the accompanying increase in GHG emissions.

Response: Comment noted.



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT 332 MINNESOTA STREET, SUITE E1500 ST. PAUL, MN 55101-1323

APRIL 17, 2023

Regulatory File No. MVP-2023-00356-DCR

Minnesota Pollution Control Agency c/o Megen Kabele 520 Lafayette Road North St. Paul, MN 55155-4194 megen.kabele@state.mn.us

Dear Ms. Kabele:

This letter is in response to correspondence we received from Centrol Crop Consulting, Inc. regarding the Luke and Melissa Stevens Swine Facility site located in Section 36, Township 115 North, Range 41 West, Yellow Medicine County, Minnesota. This letter contains our initial comments on this project for your consideration. The purpose of this letter is to inform you that based on the Luke and Melissa Stevens Swine EAW, a Department of the Army (DA) permit may not be required for your proposed activity where there is no discharge within an aquatic resource, including wetlands. Various portions of the project locations have hydric soils and are not clear if they would be considered wetland. An off-site or on-site review of wetland signatures or characteristics could assist in determining the presence of aquatic resources on-site. In lieu of a specific response, please consider the following general information concerning our regulatory program that may apply to the proposed project.

If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit.

If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404. Information about the Corps permitting process can be obtained online at <u>http://www.mvp.usace.army.mil/regulatory</u>.

The Corps evaluation of a Section 10 and/or a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

Regulatory Division (File No. MVP-2023-00356-DCR)

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

If an application for a Corps permit has not yet been submitted, the project proposer may request a pre-application consultation meeting with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. A pre-application consultation meeting is strongly recommended if the proposal has substantial impacts to waters of the United States, or if it is a large or controversial project.

If you have any questions, please contact me in our La Crescent office at (651) 290-5900 or Daniel.c.reburn@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

Dan Reburn Regulatory Specialist

CC:

Ian Olson (Centrol Crop Consulting, Inc.) Brent Louwagie (Centrol Crop Consulting, Inc.)

Skyler Sutherlin

Per the EPA(1) methane is a greenhouse gas (GHG) 25 times more potent than CO2. The EAW for the project indicates that the project will result in significant methane release into the atmosphere. Methane output can be reduced by making adjustments to the feed that the animals consume, however per the EAW, the owners "do not own the pigs" and will not be able to control or adjust their diet. With the EAW's acknowledgment that Minnesota is one of the most rapidly warming states and that 30% of the state is expected to transition to a different biome by the end of the century, it would seem that there needs to be accountability at all levels for GHG emissions, and efforts to reduce and eliminate those emissions should be paramount for the preservation of the landscape. It becomes difficult to take necessary measures to maintain our atmosphere and environment when the owners of a project attempt to evade culpability for one of the most impactful pollutants that will be emitted by their project. By continuing to allow the development of projects that emit GHG without checks and counters to these emissions, we are only increasing the pace of climate change and the destruction of our landscape.

"According to the United Nations Food and Agriculture Organization, gases from livestock, such as methane and ammonia, account for 18 percent of greenhouse gas emissions, an amount greater than the contribution from cars and other transportation."(2)

The EAW also inadequately accounts for the secondary increase in GHG from the transportation of the animals from the contained feed operation to the slaughterhouse, and the GHG associated with slaughterhouse operations, warehouse overhead emissions, packaging production emissions, and then the tertiary transportation of the packaged product to the final point of sale location. It can be inferred that there are significant GHG emissions secondary and tertiary to (but directly caused by) the primary operation of the feedlot, which are left unaccounted for in this assessment, and which would not be produced if not for the operation of the feedlot.

With the advent of food sources that have minimal GHG emissions and which do not involve raising livestock (which is one of the primary sources of anthropogenic methane emissions), any community benefit of marginally increased meat production from this farm, and the marginal decrease in the need for artificial fertilizer application in the surrounding area cannot overcome the harm caused by the accompanying increase in GHG emissions.

1. https://www.epa.gov/gmi/importance-methane#:~:text=The largest sources of methane,livestock enteric fermentation, and landfills

2.

http://greatlakesecho.org/2009/09/25/researchers-study-environmental-impact-of-free-range-pig-production/