February 4, 2011

TO: INTERESTED PARTIES

RE: Granite Falls Energy, LLC Ethanol Plant Expansion Project

The Minnesota Pollution Control Agency (MPCA) has approved the Findings of Fact, Conclusions of Law, and Order for a Negative Declaration on the need for an Environmental Impact Statement on the proposed Granite Falls Energy, LLC Ethanol Plant Expansion Project, Chippewa County. The Findings of Fact, Conclusions of Law, and Order 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 the revised Environmental Quality Board rules, Minn. R. 4410.1700, subp. 7. Final governmental decisions to grant a permit or other approval for the project may now be made.

These documents can be reviewed at the following locations: the MPCA offices in St. Paul and Willmar; the Minneapolis Public Library at 300 Nicollet Mall, Minneapolis; and the Montevideo/Chippewa County Library at 224 South First Street, Montevideo. The document can be viewed on our MPCA Web site at http://www.pca.state.mn.us/news/eaw/index.html. Requests for copies of these documents may be made by contacting the St. Paul office at 651-757-2101.

We want to express our appreciation for comments submitted on the Environmental Assessment Worksheet. Comments and responses to them have been incorporated into the Findings of Fact, Conclusions of Law, and Order and have been considered by MPCA staff in drafting permits for the proposed project.

Sincerely,

[Signature]

Joseph Henderson
Supervisor, Strategic Projects Sector Unit
Strategic Projects Sector
Industrial Division

JH: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  
GRANITE FALLS ENERGY, LLC ETHANOL PLANT EXPANSION PROJECT  
GRANITE FALLS, CHIPPEWA COUNTY, MINNESOTA  

FINDINGS OF FACT

Pursuant to Minn. R. 4410.1000 - 4410.1600, the Minnesota Pollution Control Agency (MPCA) staff has prepared an Environmental Assessment Worksheet (EAW) for the proposed Granite Falls Energy, LLC – Ethanol Plant Expansion Project (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.

Project Description

1. Granite Falls Energy, LLC (GFE) is an existing fuel-ethanol production facility (Facility) located in Granite Falls, Minnesota at the junction of United States Highway 212 (US 212) and Minnesota State Highway (MN 23). GFE proposes to expand its Facility from its current capacity of 49.9 to 70 million gallons per year (MMGY).

2. An EAW was prepared for the current Facility in 2003 and revised in 2004. The Facility was constructed and became operational in November 2005.

3. The Facility expansion would occur within the current site footprint. The ethanol production expansion will be achieved by system optimization, energy efficiency improvements and by adding new production equipment. GFE’s primary source of fuel for its ethanol production process is natural gas (propane can be used as a backup).

4. The current Facility uses corn and soybeans as feedstock for ethanol production. The existing Facility, as currently permitted, processes a maximum of 540,000 tons per year (TPY) of corn and 15,500 TPY of soybeans. The proposed expanded Facility would have a maximum permitted capacity of 750,000 TPY of corn, with no change in soybean capacity. The expanded Facility may also utilize molasses and off-spec liquid sugar as alternative feedstocks in the fermentation process. GFE’s air emissions permit will allow it to blend up to a maximum of 30 percent by weight of alternative feedstock material with corn or soybeans.

5. The Facility will continue to produce Wet Distillers’ Grains with Solubles (Wetcake), Distillers’ Dried Grains with Solubles (DDGS), and Modified Distiller’s Grain and Solubles (MDGS), corn syrup and corn oil. The Facility’s Wetcake production will be limited to 1,000 tons per day by its air emissions permit.

6. Permitting requirements are listed in Finding 52. These permits will mandate that the proposed Facility operate in compliance with all applicable regulatory requirements.

Environmental Concerns

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7. Typical environmental concerns expressed for ethanol production facilities include the potential for air emissions, odors, noise, traffic, water use, spills, and surface-water discharge impacts.

8. The MPCA must make a decision on the need for an Environmental Impact Statement (EIS) based on the Environmental Quality Board (EQB) rules found in Minn. R. ch. 4410 and listed in Finding 14. The MPCA’s findings on the four EIS criteria are given in Findings 15 through 59.

**Procedural History**

9. Pursuant to Minn. R. 4410.4300, subp 5B, an EAW was prepared by MPCA staff on the proposed Project. An EAW is mandatory for the project since it would increase GFE’s ethanol production capacity by over 5 MMGY. Pursuant to Minn. R. 4410.1500, the EAW was distributed to the EQB mailing list and other interested parties on December 23, 2010.

10. The MPCA notified the public of the availability of the EAW for public comment. A news release was provided to media statewide, as well as other interested parties, on December 21, 2010. The notice of the availability of the EAW was published in the *EQB Monitor* on December 27, 2010. The EAW was made available on December 27, 2010, on the MPCA Web site at [http://www.pca.state.mn.us/news/eaw/index.html](http://www.pca.state.mn.us/news/eaw/index.html).

11. The MPCA held a public informational meeting on January 10, 2011, during the EAW public notice period, at the Minnesota West Community Technical College in the city of Granite Falls, Minnesota.

12. The public comment period for the EAW began on December 27, 2010, and ended on January 26, 2011. During the 30-day comment period, the MPCA received a total of seven comment letters in response to the EAW. The comments letters were from three government agencies, three businesses, and from one citizen. No commenters requested an EIS for the Project.

13. Appendix A to these findings contains a copy of each comment letter received by the MPCA during the 30-day public comment period. The MPCA prepared written responses to these comment letters. The responses are included in Appendix B to these findings.

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

14. Under Minn. R. 4410.1700, the MPCA must order an EIS for projects that have the potential for significant environmental effects that are reasonably expected to occur. 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. cumulative potential 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

15. 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.

16. Reasonably expected environmental effects of this Project to air quality:

A. Air Emissions
B. Odors
C. Noise
D. Climate Change

17. The extent of any potential air quality effects that are reasonably expected to occur:

A. Air Emissions
   An analysis of the potential air emissions of air pollutants has been performed in conjunction with the proposer’s application for a revision to its Air Permit.

   Title V
   The existing GFE Facility is a permitted synthetic minor air emissions source under Title V of the federal Clean Air Act Amendments (CAA). The proposed Facility expansion will result in increased carbon monoxide (CO) and nitrogen oxide (NOx) emissions which are greater than the Title V major source threshold (i.e., 100 TPY). Therefore, the expanded Facility will be a major source under the Title V permitting program. The Facility will employ air pollution control equipment (e.g., thermal oxidizers, wet scrubbers, and baghouses) and be governed by permit limits that will limit ethanol production to 70 MMGPY.

   Prevention of Significant Deterioration (PSD)
   The existing GFE Facility is a synthetic minor air emissions source under the federal PSD program since its emissions are limited to less than 250 TPY (i.e., PSD threshold) for all regulated pollutants. The proposed expanded Facility will remain a synthetic minor source for PSD because GFE will voluntarily accept air emission limits, monitoring, recordkeeping, performance testing, and operational requirements to ensure that air emissions do not exceed 250 TPY.

   GFE’s existing air emissions permit is a “flex-cap” permit that pre-authorizes the installation of additional air emissions equipment at the Facility (i.e., no new permit is needed for the installation of additional air emissions equipment). These changes are allowed because the
flex-cap permit restricts the total Facility-wide air emissions through feedstock and ethanol production limits. The flexibility provisions will be carried forward in the proposed air emissions permit, along with the corresponding documentation and recordkeeping requirements.

It should be noted that the United States Environmental Protection Agency’s (EPA) greenhouse gas tailoring rule is scheduled to have its second phase implemented in July 2011. If the implementation proceeds as scheduled, the Facility will become a major source relative to PSD regulations because GFE’s potential greenhouse gas (GHG) emissions will be above the 100,000 TPY major source threshold. At the time that the GFE facility becomes a major PSD source, the flexibility provisions will no longer be allowed. Therefore, the proposed air emissions permit contains language that specifically states that the flexibility provisions will no longer be applicable if and when the GFE facility becomes a major PSD source. From that time forward, any changes at the GFE facility would require evaluation of the potential emissions associated with each change relative to PSD major source modification significance thresholds for all criteria pollutants.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)
The Facility is a synthetic minor source of hazardous air pollutants (HAPs) because GFE’s limited emissions are less than 25 TPY of total HAPs and less than 10 TPY of any individual HAP (i.e., they are under the major source threshold). The Facility is not a major source under the NESHAP requirements, but GFE is considered an “area source” as defined by the NESHAP rule.

Stack test data from the Minnesota ethanol industry shows that if total volatile organic compounds (VOCs) are below major source thresholds, then HAPs are below the threshold by a greater margin on a proportional basis. As a result, the MPCA’s practice has been to regulate single and total HAP emission from ethanol facilities through VOC emission limits.

GFE’s current air emissions permit requires it to conduct stack testing for VOCs. GFE’s stack test data show that maximum single HAP emissions are well below 10 TPY. The proposed air emission permit for the Facility expansion project will also include VOC testing. As a safeguard, the proposed permit also includes a requirement for GFE to submit a permit amendment application to the MPCA if any single HAP emissions should equal or exceed 9.95 TPY.

Since GFE is an area source under NESHAP regulations, its emergency fire water pump is subject to 40 CFR, pt 63, Subpart ZZZZ - National Emissions Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Subpart ZZZZ was promulgated in March 2010 and became effective in May 2010. The rule was modified to include all new and reconstructed reciprocating internal combustion engines (RICE) at area sources of HAPs. This rule establishes emissions and operating limitations for HAPs for reciprocating internal combustion engines.

Table 23-3 of the GFE EAW summarizes the Facility’s limited emissions and applicable air regulations.
Air Dispersion Modeling
Air dispersion modeling was conducted to determine if the proposed GFE project will be in compliance with Minnesota Ambient Air Quality Standards (MAAQS) and National Ambient Air Quality Standards (NAAQS).

The air dispersion modeling took into account all of the air emission sources shown in Table 23-1 and Table 23-2 of the GFE EAW, as well as onsite vehicle emissions (road dust only – not tailpipe exhaust). The modeling also included existing nearby and regional air emission sources of nitrogen dioxide (NO₂), particulate matter smaller than 10 microns (PM₁₀), and sulfur dioxide (SO₂) and pollutant concentrations in the ambient air (i.e., background conditions).

The modeling indicated, as shown in Table 23-4 of the EAW, that GFE will meet all MAAQS and NAAQS (including the new federal NAAQS for 1-hour NO₂ and 1-hour SO₂).

Air Emissions Risk Analysis (AERA)

Process
The MPCA developed the AERA process to provide: (1) a streamlined health review of facility air emissions; and (2) a consistent format for presenting quantitative risk estimates, along with contextual qualitative information. An AERA estimates cancer and non-cancer risks to human health from a proposed project and/or an existing facility. Facility risk guidelines, which are consistent with EPA guidance, were developed by the MPCA in consultation with the Minnesota Department of Health. The guidelines were established such that the increased chance of a person getting cancer over the course of their lifetime from exposure to the carcinogenic chemical emissions from a given facility should not exceed 1 in 100,000. The facility guideline for non-carcinogenic chemicals is that the sum of the risks (called a “hazard index”) should not exceed 1. If emissions from a facility result in estimated risks in excess of these levels, MPCA staff evaluates whether further refinement, further investigation, or modifications are warranted. All quantitative risk estimates have uncertainty related to the following factors: air emission estimates, air dispersion modeling, exposure assumptions, and toxicity information. These uncertainties are considered qualitatively within the AERA process and assumptions are made to minimize the potential for underestimating risks. Interested readers can find more detailed information on the air risk analysis process at:  http://www.pca.state.mn.us/air/aera.html.

Facility Evaluation
The GFE AERA characterized potential health risks from both the existing and proposed expanded Facility. The AERA took into account 30 pollutants from 12 different emission units (see Appendix 3 of the EAW). The pollutants with the highest risk estimates were acetaldehyde and acrolein (emitted from the thermal oxidizer (TO), regenerative thermal oxidizer (RTO), carbon dioxide (CO₂) scrubber, DDGS cooling system, equipment leaks, and fugitives), benzene (fugitives from loadout areas), NO₂ (emitted from the TO, RTO, and grain dryer), and acetic acid (from Wetcake storage). GFE’s air emissions were estimated from previous stack testing results, air emission permit limits, EPA’s AP-42 air emission factors, EPA’s air emission calculation program for tanks (TANKS), air emissions stack testing results from other ethanol plants, and engineering estimates. The AERA assumed that corn would be used as GFE’s main feedstock. If GFE wishes to use a feedstock other than those authorized in the permit in the future, it is required by its air emissions permit to conduct additional stack testing to verify the emissions factors. The AERA did not include risk estimates from onsite vehicles because: under typical
operating conditions the Facility will not have vehicles in line idling continuously for long periods of time, there is no standard method for estimating risks from vehicles, and the Facility’s air emissions permit will require GFE to submit a diesel idling prevention plan.

**Results**

Both screening and refined risk modeling were conducted for the GFE AERA. Refined risk modeling results indicate the following:

- **Non-cancer Risks** - The maximum potential acute (i.e., 1-hour exposure) and chronic (i.e., annual lifetime exposure) non-cancer health risks from this Facility are both expected to decrease as a result of the expansion project. The potential non-cancer health risk will decrease because GFE’s air emissions permit will contain a limit on the amount of wetcake that it can produce (1,000 tons per day). Wetcake emissions are a major risk driver at ethanol plants. In addition, the maximum estimated air pollutant concentrations and corresponding hazard indices significantly diminish with distance from the property boundary.
  - **Acute** - The estimated maximum potential acute hazard index from the expanded Facility is 1.4. This assumes the Facility is simultaneously producing wetcake and DDGS at its maximum production rate, which is unlikely to occur. The modeling shows the maximum potential risks to be along the proposed western fence line of the Facility (see Figure 9 of the EAW). There are no residences at this location. The estimated acute hazard index at residences is below facility health risk guidelines.
  - **Chronic** - Maximum chronic and sub chronic non-cancer risk estimates are below facility risk guidelines at all locations (see Figure 10 of the EAW).

- **Cancer Risks** – The cancer risk estimates increase with the Facility expansion, but remain below facility risk guidelines at all locations.

- **Multimedia Exposure Risks** - The multimedia exposure risks, which include inhalation and non-inhalation pathways, were assessed in the AERA screening analysis for a hypothetical residential and farming exposure scenario. All chemicals contributing to the non-inhalation risks are due to natural gas combustion and are well below facility risk guidelines at all locations. The residential exposure scenario assumes that the resident breathes the air 24 hours a day at the location of maximum modeled air concentrations and ingests soil and eats vegetables grown at that location. The farming exposure scenario has the same assumptions as the residential scenario and, in addition, assumes that the person raises and eats beef, pork, and chicken, and also consumes milk and eggs produced from the animals raised on forage grown at the location of maximum predicted air concentrations. This assumes that the air pollutants deposit onto the animal feed.

- **Fisher Exposure Risks** - No fisher pathway analysis was conducted because the chemicals contributing to fisher risks are due to natural gas combustion. Natural gas has a low level of emissions of pollutants that are considered persistent, bio-accumulative or are toxic through fish ingestion.

The MPCA reviewed the Project’s air emission permit requirements (emissions limits, pollution control equipment, recordkeeping, reporting and testing), criteria pollutant modeling analysis results (which showed the Project to be in compliance with MAAQS and NAAQS), and the results from the AERA. Based on this review, the MPCA finds that the Facility’s air emissions do not have a reasonable potential to result in significant environmental effects.

**B. Odors**
VOCs from the fermentation, distillation, DDGS dryers, and wetcake spoilage are generally considered to be the main contributors to odor issues at ethanol facilities. The following odor control measures currently are in place at GFE. GFE will continue to employ these practices at the proposed expanded Facility (as required by GFE’s air emissions permit).

- **Fermentation** process odors will continue to be controlled by the Facility’s existing wet scrubber. The scrubber has a 98% destruction efficiency for the VOCs, which are the main source of odors from the fermentation process.
- **Distillation** process odors will continue to be controlled by the Facility’s existing TO/HRSG. The TO/HRSG has a 95% destruction efficiency for VOCs.
- **DDGS** dryer odors will continue to be controlled by the Facility’s existing thermal oxidizer/heat recovery steam generator (TO/HRSG). The odors from GFE’s new DDGS Dryer #3 will be controlled by its new RTO. Both the TO/HRSG and the RTO have a 95% destruction efficiency for VOCs.
- **Wetcake** spoilage odors will continue to be controlled by prevention. The Facility’s air emissions permit will continue to require removal of wetcake within 72 hours (unless the ambient temperature is less than 55 degrees Fahrenheit) of its generation to prevent odors from spoilage.

No significant odor impacts are expected from the Facility expansion due to these odor control measures.

C. **Noise**

Some additional noise would be generated as a result of the additional hammermill. The Facility’s current hammermills are housed within a concrete structure between the two corn storage silos. The additional hammermill will also be housed in the concrete structure. This concrete webbing (i.e., the concrete poured between the posts and columns of the structure) would provide noise mitigation for the milling process. Additional noise attenuation measures will be installed if applicable state noise standards are not met. Due to these noise mitigation measures, the Project is not expected to result in significant noise impacts.

D. **Greenhouse Gas Emissions**

While it is not possible to directly link GHG emissions from a specific proposed project to specific regional or global climate change, the GHG emissions from the Facility can be measured and evaluated in relation to other facilities or fuels that emit GHG.

The GHG emissions generated from all Minnesota sources was estimated at 153.7 million tons of CO₂ equivalents (CO₂e) in 2004. GFE’s potential CO₂e emissions are estimated for both the current and proposed expansion capacities in Table 23-6 and Table 23-7 of the GFE EAW. GFE’s current Facility has a CO₂e emissions level of approximately 142,430 TPY. GFE’s proposed expanded Facility will have an approximate CO₂e emissions level of 190,596 TPY. This level of CO₂e emissions is a small percentage of Minnesota’s total CO₂e emissions and is not expected to result in significant environmental impacts.
18. The reversibility of any potential air quality effects that are reasonably expected to occur:

The MPCA finds that any potential effect that is reasonably likely to occur from this Project would be reversible. Once emissions are released to the air, they cannot be recovered, but the release can be stopped. If air quality were to be impacted, there are measures that can be implemented to minimize impacts. For example, the MPCA could initiate a complaint investigation and require the Project proposer to make operational and maintenance changes. As discussed above, the expected effects on air quality are minimal. There is no reason to believe that this Project is reasonably expected to cause a significant negative effect on air quality.

19. No comments were received that expressed concerns regarding potential effects to air quality.

20. The MPCA finds that the environmental review is adequate to address the concerns because:

All potential impacts to air quality that are reasonably expected to occur from the proposed Project have been considered during the review process and methods to prevent these impacts have been developed.

21. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of its air emissions.

22. Reasonably expected environmental effects of this Project to traffic:

23. The extent of any potential traffic effects that are reasonably expected to occur:

A. Truck
MN 23 and US 212 are the primary transportation routes used by trucks and other vehicles arriving and leaving the Facility. The truck traffic to the Facility will increase by an average of 33 truck trips per day (i.e., current truck traffic average is 67 truck trips per day). Peak hourly traffic is estimated at 25 truck trips. GFE’s air emission permit will limit traffic to a maximum of 251 trucks per day. 90 percent of traffic is from 8:00 a.m. to 5:00 p.m. and 10 percent from 5:00 p.m. to 8:00 a.m. The percentage of increased traffic to MN 23, due to the Project, would be approximately one percent. The percentage of increased traffic to US 212, due to the Project, would be approximately one percent. This level of increase in vehicle traffic is not significant.

B. Rail
The Facility receives grain and ships out ethanol and DDGS through its rail system. Rail access to the Facility is via the Twin Cities-Western Rail line. In 2009, train traffic was 1,051 cars of corn, 786 cars of DDGS, and 1,718 cars of denatured ethanol. Train traffic with the proposed expansion is estimated to be approximately 1,474 cars of corn, 1,102 cars of DDGS and 2,410 cars of denatured ethanol.

Trains off-load grain and pickup ethanol and DDGS, typically once a day, up to six times per week. The amount of cars per train may increase with the Facility expansion, but the number of train drop-offs and pickups are expected to remain the same. The MPCA finds that this increase in rail traffic will not be significant.
24. The reversibility of any potential traffic effects that are reasonably expected to occur:

The MPCA finds that any potential effect from traffic that is reasonably likely to occur from this Project would be reversible. The expected effects of this Project specific to traffic are minimal. There is no reason to believe that this Project is reasonably expected to cause a significant environmental effect from truck or rail traffic.

25. No comments were received that expressed concerns regarding potential effects to traffic.

26. The MPCA finds that the environmental review is adequate to address the concerns because:

All potential impacts to traffic that are reasonably expected to occur from the proposed Project have been considered during the review process and methods to prevent these impacts have been developed.

27. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of traffic.

28. Reasonably expected environmental effects of this Project to **water use**:

29. The **extent** of any potential water use effects that are reasonably expected to occur:

*Water Sources*
GFE’s production water sources are shown in Figure 7 of the EAW. GFE’s primary source of process water is the Minnesota River (Station SW001). GFE is also authorized to use its two production wells (Stations GW#1 and GW#2) (Minnesota Unique Well [MUW] numbers #716070 and #723680) on a contingency basis (e.g., during low-flow conditions in the Minnesota River). In addition, GFE uses water, as available, collected in its two onsite stormwater ponds. GFE has a separate onsite well for potable water (MUW #723654). The GFE expansion project will not result in a change in the Facility’s water sources or water appropriation.

*Current Water Appropriation Permit*
GFE’s water use is regulated by the Minnesota Department of Natural Resources (DNR’s) Water Appropriation Permit Program. The DNR has issued water appropriation permits to GFE for its use of Minnesota River water ( Permit No. 2007-0016) and its groundwater wells (Permit No. 2004-4115). These permits limit GFE to a total water appropriation of 250 MMGY (600 gallons per minute [GPM]).

The Minnesota River is GFE’s main source of water. GFE’s wells can only be used for contingency purposes. Contingency purposes means when Minnesota River appropriations are suspended due to low-flow protection or other restrictive factors that temporarily suspend the use of surface water from the Minnesota River.
GFE is not requesting an increase in its permitted water appropriation from the DNR.

**Actual Water Use**
According to DNR records, GFE pumped a total of 115.3 MMGY of surface water from the Minnesota River in 2008 and 125.6 MMGY in 2009. GFE did not pump any groundwater from its production wells in 2008 or 2009. This amount of water use is well within GFE’s water appropriation permit limit of 250 MMGY. The amount of water used by GFE is required to remain below the 250 MMGY limit contained in its water appropriation permits.

The proposed Facility’s water use is not expected to cause a significant environmental effect because it will remain below its DNR approved water appropriation permit limit of 250 MMGY.

**Water Appropriation Permit History**
The DNR issued Water Appropriation Permit No. 2004-4115 to GFE in June 2005, which authorized the Facility to use up to 240 MMGY of groundwater from its well (GW#1). GFE later applied to the DNR for a permit amendment to add a second well (GW#2) and to increase its water appropriation from 240 to 250 MMGY. In August 2006, the DNR issued a permit to GFE that authorized GW#2 and increased the Facility’s appropriation to 250 MMGY. GFE’s Water Appropriation Permit No. 2004-4115 expired in December 2008. GFE requested reissuance of its permit. The DNR re-issued GFE’s permit in December 2008 at the same groundwater appropriation amount (250 MMGY).

GFE also applied to the DNR for a change to its primary source of process water from groundwater to surface water from the Minnesota River. In response, the DNR issued Water Appropriation Permit No. 2007-0016 to GFE in September 2006. The permit allows GFE to take water from the Minnesota River and use groundwater as backup. The permit contains a total Facility water use limit of 250 MMGY (i.e., the sum of GFE’s Minnesota River water and groundwater).

GFE’s surface water appropriation permit restricts the Facility’s use of surface water when the flow in the Minnesota River is below its Q90. The Q90 exceedance flow is the stream discharge that statistically was exceeded 90 percent of the time during the period of record analyzed. For the Minnesota River, at this location (gage located at Montevideo), the Q90 is 36 cubic feet per second. When the Minnesota River falls below its Q90, it is considered to be in a critically low flow condition.

**Water Treatment**
The proposed expanded Facility will continue to use its Cold Lime Softening (CLS) system to treat its incoming Minnesota River water. The CLS system was authorized by NPDES/SDS Permit No. MN0066800. The CLS system allows GFE to have a more uniform level of incoming water quality in support of production and for maintaining compliance with the Facility’s NPDES/SDS discharge limits (i.e., more consistent incoming water quality means more consistent effluent water quality). The CLS system generates lime solids which are treated by filter presses to remove water. The CLS gravity filter backwash and filter press overflow are returned to the head of the CLS. The filtered solids are stored in indoor bunkers, before transport offsite to an authorized landfill. Alternatively, the solids can be used for agricultural liming. The CLS-treated water supplies the Facility with boiler makeup water, cooling tower makeup water, and the water makeup for the ethanol, stillage, and DDGS production processes.
After CLS treatment, the water makeup supply undergoes further treatment by reverse osmosis (RO) and water softening. The Facility currently has one RO unit (RO#1). The expanded Facility will add a second RO unit (RO#2) to further treat the concentrate stream from RO#1. The RO filter permeate stream is used in the cooling tower make-up. The concentrate stream (i.e., reject water) from the unit is split with a portion going into the ethanol production process and a portion being removed offsite for disposal at the Metropolitan Council Wastewater Treatment Plant, when necessary. The cooling tower blowdown is treated by carbon filtration before discharge to outfall SD001. Backwash from the carbon filter is routed to the head of the CLS system.

30. The reversibility of any potential water use effects that are reasonably expected to occur:

The MPCA finds that there is not a reasonable potential for significant environmental effect to water resources from this Project and, although none are expected to occur, the MPCA finds that any potential effect that might be reasonably expected to occur from this Project would be reversible.

31. No comments were received that expressed concerns regarding potential effects from water use.

32. The MPCA finds that the environmental review is adequate to address the concerns because:

All potential impacts from water use that are reasonably expected to occur from the proposed Project have been considered during the review process and methods to prevent these impacts have been developed.

33. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of water use.

34. Reasonably expected environmental effects of this Project to **surface water discharge**:

35. The extent of any potential surface water discharge effects that are reasonably expected to occur:

A. **Stormwater**

   The Facility’s existing site has been designed and constructed to collect and control onsite stormwater (see EAW Figure 7). All stormwater generated onsite flows to GFE’s two stormwater ponds (SD002 and SD003). The GFE expansion Project will increase the size of the ethanol production Facility by 0.9 acres. The expanded Facility’s process equipment “footprint” will remain within the current GFE property boundary. The runoff from the impervious surfaces and new tank farm area created by the Facility expansion will also be collected by GFE’s stormwater ponds. The quantity of stormwater collected onsite is expected to increase slightly due to the small increase in the Facility’s impervious surface area. The Facility’s existing stormwater ponds are large enough to contain this small amount of additional stormwater. No change is expected in the quality of stormwater runoff from the Facility site.

   GFE is required by its Facility’s NPDES/SDS Permit to direct stormwater to its ponds and to implement an Industrial Stormwater Pollution Prevention Plan (SWPPP) for its stormwater discharge. The SWPPP will remain in effect throughout the expansion project. The Ponds and SWPPP will ensure that post-expansion stormwater quality will not violate water quality standards and that stormwater quality will be similar to pre-expansion conditions.
Water from the north stormwater pond (discharge SD002) is transferred to the south stormwater pond (discharge SD003). The water contained in the south pond can be directed to the ethanol production process. Water from either stormwater pond can alternatively be discharged to onsite ditches. SD002 discharges to an unnamed railroad ditch that drains west approximately 7,800 feet to an unnamed creek that is a tributary to the Minnesota River. SD003 discharges to a series of unnamed ditches that drain to the south and west approximately 7,100 feet to a different unnamed creek tributary to the Minnesota River. These ditches and creeks and the Minnesota River are all Class 2B, 3C, 4A, 4B, 5, 6 waters.

GFE’s stormwater ponds’ discharge is currently and will continue to be regulated by NPDES Permit No. MN0066800. GFE’s NPDES/SDS permit requires it to analyze the water collected in the Facility’s stormwater ponds and any water drained to the stormwater ponds from the above ground storage tank’s (AST’s) secondary containment structures. Water from the AST’s secondary containment structure is authorized to be directed to the stormwater ponds following analysis for fuel-related contaminants. The AST secondary containment structure is also used to collect stormwater from the Facility’s truck and rail loadout areas. Prior to releasing any stormwater from the Facility tank farm areas, the water must be analyzed to verify that no fuel-related contaminants are present. In the event fuel-related contaminants are present, the Facility may not discharge the water. The Facility is not allowed to discharge water from its ponds unless it can meet the discharge effluent limits listed in Table 17-1 of the EAW. The limits were set to be protective of downstream waters beneficial uses.

The implementation of Best Management Practices (BMPs) to control runoff during construction and operation of the proposed Facility and adherence to the requirements in the general construction stormwater discharge permit and individual industrial stormwater discharge permit will ensure that the quality and quantity of runoff leaving the site will not have a negative impact on any receiving water bodies.

B. Wastewater

Process Wastewater
GFE uses surface water from the Minnesota River in its ethanol production process. This water absorbs organic chemicals as it moves through the ethanol production process and, thus, becomes “process wastewater.” GFE does not discharge its process wastewater but, instead, treats it onsite and re-introduces it into the ethanol production process.

GFE currently has two anaerobic digesters which treat process wastewater. The Project includes the addition of two more digesters. The digesters lower the concentration of organics in the process wastewater to the point where it can be recycled back into the Facility’s ethanol production process. Due to this treatment and recycling process, GFE does not discharge any process wastewater to the environment. The expanded Facility will not discharge process wastewater.

Non-Process Utility Wastewater
The Facility currently discharges its non-process utility wastewater via an underground gravity-flow pipeline to Renville County Ditch 36 (SD001) (see EAW Figure 7). The discharge will not change with the proposed Facility expansion. Renville County Ditch 36 is an “unlisted water”
under Minn. R. 7050.0430. Unlisted waters are classified as Class 2B, 3C, 4A, 4B, 5, and 6 waters under Minnesota rules. Renville County Ditch 36 flows approximately 2,300 feet to Hawk Creek (Class 2B, 3B, 4B, 5, and 6 water). Hawk Creek flows approximately 9.7 miles to the Minnesota River (Class 2B, 3C, 4A, 4B, 5, and 6 water).

Currently GFE’s non-process utility wastewater is generated from its RO water treatment system, water softening system, and carbon filters, as well as from its cooling tower. The expanded Facility will be modified so that it will only generate non-process utility wastewater from its cooling tower. GFE will accomplish this by adding water treatment equipment to further treat the current sources of wastewater to the point where their discharges are clean enough to be recycled back into the Facility’s ethanol production process.

GFE will install an additional RO system to their water treatment equipment. The additional RO treatment system will allow GFE to eliminate most of the current sources of non-process utility wastewater by treating internal flows to a higher quality and removing more of the constituents present in the incoming water. In addition, the Facility will be circulating waste streams (previously discharged) back to the CLS system. In this way, GFE will be able to eliminate filter backwash wastewater from being discharged from the Facility. GFE is able to eliminate some of the RO reject and the water softener regenerate wastewater by diverting these flows to the ethanol production process. Water used in the ethanol production process is either recycled or evaporated during the production of co-products. Due to elimination of these sources of wastewater to the Facility’s total discharge, and through lowering the pollutant loads generated by the Facility’s cooling tower due to improved water treatment processes, the proposed expanded Facility’s non-process utility wastewater will reduce pollutant concentrations and mass to less than the Facility’s current discharge.

Table 18-1 of the EAW lists the NPDES/SDS effluent limits for GFE’s proposed expanded Facility’s non-process utility wastewater discharge. The volume of non-process utility wastewater that is currently permitted to be discharged will not change with the Facility expansion. The discharge volume permit limit will remain at 93,200 GPD (average) and 132,400 GPD (maximum).

The additional water treatment equipment and reduced pollutant loading will ensure that there are no significant environmental affects to surface water from the Project.

**Sanitary Wastewater**

The Facility generates sanitary wastewater from its employee restrooms, lunchroom, and laboratory sinks. The volume of sanitary wastewater is approximately 1,000 gallons per day. Following expansion, GFE may hire two to three additional personnel; one on normal days and two shift workers. This is equivalent to one additional person per 24-hour period. The disposal of sanitary wastewater is to an onsite septic system, which is regulated by Chippewa County. The Facility’s proposed expansion will not significantly impact this discharge.

36. The reversibility of any potential surface water discharge effects that are reasonably expected to occur:

The MPCA finds that there is not a reasonable potential for significant environmental effect from wastewater from this Project and, although none are expected to occur, the MPCA finds that any potential effect that might be reasonably expected to occur from this Project would be reversible.
37. No comments were received that expressed concerns regarding potential effects to surface water discharge.

38. The MPCA finds that the environmental review is adequate to address the concerns because:

   All potential impacts to surface water discharge that are reasonably expected to occur from the proposed Project have been considered during the review process and methods to prevent these impacts have been developed.

39. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of surface water discharge.

40. Reasonably expected environmental effects of this Project from spills:

41. The extent of any potential spill effects that are reasonably expected to occur:

   GFE has AST secondary containment structures, written spill prevention procedures, and a SWPPP to help prevent spills, and minimize their impact, if it were to occur. For example, GFE’s ASTs have secondary containment to prevent any spill from a tank from being released to the environment. If a spill were to occur within the truck and rail loadout areas, it would flow by gravity to GFE’s AST secondary containment structures. If a spill occurred outside of GFE’s AST area, it would flow to the nearest stormwater collection structure and then on to the Facility’s stormwater ponds. Spilled material would be contained within the stormwater detention ponds until remediation occurred. Water contained in the stormwater ponds, stays in the ponds, unless GFE personnel manually open a discharge valve. Any stormwater pond discharge would flow to ditches onsite and then on to the Minnesota River. GFE is not allowed to discharge stormwater pond water unless it has been analyzed and meets its NPDES/SDS Permit limits. The limits are set to protect the beneficial uses of the receiving waters.

42. The reversibility of any potential spill effects that are reasonably expected to occur:

   The MPCA finds that any spills that do occur would be captured by the Facility’s secondary containment structures and/or the stormwater ponds. These materials can be re-introduced into the Facility or handled by appropriate waste disposal methods, such as removal to a treatment facility, or a disposal facility as described in the Spill Prevention, Control and Containment Plan.

43. No comments were received that expressed concerns regarding potential effects from spills.

44. The MPCA finds that the environmental review is adequate to address the concerns because:

   All potential impacts from spills that are reasonably expected to occur from the proposed Project have been considered during the review process and methods to prevent these impacts have been developed.

45. The MPCA finds that the Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of spills.
Cumulative Potential(106,246),(948,877)Effects of Related or Anticipated Future Projects

46. 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.

47. 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. The MPCA evaluated the potential for significant environmental effects to:

A. Air Quality
B. Water Use
C. Surface Water Discharge

A. Cumulative Effects Analysis on Air Quality
Cumulative potential effects to air quality that may result from the proposed production expansion project have been evaluated using air dispersion modeling tools that consider potential emissions from the proposed project, along with existing Facility emissions and nearby sources. Other regional/background sources, including mobile sources, were also added to the cumulative effects analysis. Potential human health effects from the project were also evaluated using the AERA process.

Air Dispersion Modeling
Since the proposed production expansion project will increase air emissions above Title V thresholds, air dispersion modeling was conducted to determine compliance with NAAQS and MAAQS. The air dispersion modeling analysis determined that potential increases in air emissions from the proposed Facility are expected to meet all ambient air quality ambient standards (EAW Table 23-4).

AERA
The AERA for the Facility was supplemented with a cumulative effects analysis. The AERA conducted for the GFE expansion project estimated the cumulative health risks for the project by adding the health risks estimated from ambient air monitors in rural areas ("background risks") to the health risks generated by the proposed expanded Facility. The resulting background risk estimates reflect air sources such as industrial facilities, traffic, gas stations, wood-burning stoves, etc. The health risks estimated for the GFE expansion project are shown in Table 29-1 of the EAW.

Cumulative Non-cancer Risk Results
The maximum cumulative total hazard indices at the location of residences are below MPCA facility risk guidelines for both acute and chronic risk (i.e., they are both less than 1). The maximum cumulative total acute and chronic non-cancer hazard indices (i.e., 1.6 and 1.3, respectively) are above the MPCA facility specific health risk guideline of 1; however, there are no residences in the area where these maximum hazard indices are predicted to occur. The modeling shows the maximum potential risks to be along the proposed western fence line of the Facility. Since the land to the west of the Facility could be developed in the future, the MPCA has sent a copy of this EAW to Granite Falls Township, the city of Granite Falls, and Chippewa County. Because the
cumulative non-cancer health risks are below guidelines at all locations where there are residences, the MPCA finds that the proposed Project does not reasonably have the potential for significant cumulative effects on non-cancer health risks for nearby residents.

**Cumulative Cancer Risk Results**
The cumulative cancer risk is 2.5 per 100,000, which is above the MPCA facility risk guideline of 1 per 100,000, but within EPA’s acceptable risk range of 1 in 1 million to 1 in 10,000. The majority of the cumulative cancer risk for this project (i.e., 2.1 per 100,000 out of 2.5 per 100,000) is due to background air quality conditions that exist throughout the state of Minnesota. Most of the background risks are due to heritage pollutants or those that are everywhere in the environment. The cancer risk from the Facility project alone is 0.4 per 100,000, which is below both facility risk guidelines and EPA guidelines. The project expansion will contribute about 4 percent (i.e., 0.1 per 100,000 out of 2.5 per 100,000) to the estimated cumulative inhalation cancer risk.

Overall, the cumulative risk estimates in the area surrounding the Facility will be similar to other areas in the state. Therefore, the MPCA finds that the proposed Project does not reasonably have the potential for significant cumulative effects on non-cancer health risks for nearby residents.

**Climate Change**
Impacts of climate change on North America will not occur in isolation, but in context of technological, economic, social, and ecological changes. Regional impacts from climate change include the following observed or potential effects: increased mean annual air temperature (summer and winter warming), increased surface waters temperatures; later onset of winter and earlier onset of spring; precipitation may fall in fewer, but more intense, storms; species adapted to cold climates shift out of the Great Lakes basin into Canada; and aspen and birch forests will be replaced by hardwood forests of oak and hickory. Moderate climate change will likely increase agricultural yields and food production, with some regional and annual variability. The Project is not expected to contribute significantly to an adverse cumulative potential effect.

**B. Cumulative Effects Analysis on Water Use**
As discussed in Section 13 of the EAW, the DNR has issued water appropriation permits to GFE for the Facility’s use of surface water from the Minnesota River and groundwater from its two production wells (EAW Figure 7). These permits limit GFE to a total water appropriation of 250 MMGY (600 GPM). The proposed Facility expansion will not result in an increase in GFE’s permitted water appropriation.

GFE uses the Minnesota River as its main source of water. GFE’s water appropriation permit only allows the Facility to use its groundwater wells as a contingency source of water. Contingency purposes means when Minnesota River appropriations are suspended by DNR due to low-flow protection or other restrictive factors that temporarily suspend the use of surface water from the Minnesota River.

The DNR regulates water use in Minnesota through its water appropriation permitting program. The purpose of this program is to protect water resources from depletion. Permits issued by the DNR require the permittee to monitor water use, keep records, report water use to the DNR, and suspend water use if required by the DNR. If a water resource is becoming negatively affected by a permittee’s water use or due to natural conditions (e.g., drought), the DNR can suspend the permittee’s water use. In this way, water resources are protected from overuse.
The proposed project is not expected to have a negative environmental impact on the Minnesota River, other surface water, or on groundwater in the project area.

C. Cumulative Effects Analysis on Surface Water Discharge

*Non-Process Utility Wastewater*

The Facility currently discharges non-process utility wastewater to Renville County Ditch 36, which flows approximately 2,300 feet to Hawk Creek and then approximately 9.7 miles to the Minnesota River. The location of the non-contact utility wastewater discharge point (SD001) will remain unchanged by this project (EAW Figure 7).

GFE is the only point source discharge to Renville County Ditch 36. The following four municipal WWTFs discharge to Hawk Creek upstream of the GFE Facility: Maynard WWTF, Clara City WWTF, Raymond WWTF, and Willmar WWTF. There are no downstream point source dischargers to Hawk Creek. There are several point sources that discharge to the Minnesota River, both upstream and downstream of the Facility. No additional point source water discharges are known to be proposed or planned for Renville County Ditch 36, Hawk Creek, or the Minnesota River in the vicinity of the proposed project. There are also a large number of “nonpoint” source discharges that contribute to background concentrations of pollutants in the receiving water bodies. Examples of nonpoint sources include tile drainage, runoff from agricultural activities, and runoff from construction sites. As indicated in Section 18 of the EAW, although the ethanol production capacity of the Facility will increase, GFE’s non-process wastewater pollutant discharge concentration and mass discharge will decrease through re-balancing the water treatment system. As a result, GFE’s contribution to the cumulative impacts on Renville County Ditch 36, Hawk Creek, and the Minnesota River will decrease after implementation of the proposed project.

GFE’s proposed expanded Facility will be subject to NPDES/SDS Permit limits and Basin Permit phosphorus limits. When setting effluent limits, MPCA staff considers the existing and proposed water quality (including impairments and contributions from other dischargers) and flow conditions of the receiving water to ensure that the water quality standards are maintained.

No significant negative impacts are expected to the receiving waters from the proposed project.

*Stormwater*

The Facility has been designed and constructed to control onsite stormwater. All stormwater generated onsite flows to GFE’s two stormwater ponds. The Facility expansion project will increase the area covered by GFE equipment by 0.9 acres. The quantity of stormwater collected onsite is expected to increase slightly due to the small increase in the Facility’s impervious surface area. The Facility’s existing stormwater ponds are large enough to contain this small amount of additional stormwater. No change is expected in the quality of stormwater runoff from the Facility site.

The Facility is required by its NPDES/SDS Permit to direct stormwater to detention ponds, meet discharge limits, and to implement an Industrial SWPPP for stormwater discharge. The SWPPP will remain in effect throughout the expansion project. The ponds, discharge limits, and SWPPP will ensure that post-expansion stormwater quality will not violate water quality standards and that stormwater quality will be similar to pre-expansion conditions.

No significant environmental effects to stormwater are anticipated from the project.
48. Public comments concerning cumulative effects:

The MPCA did not receive any comments regarding cumulative effects.

49. Based information on the Project obtained from air modeling, the AERA, the permit application processes, the site visit conducted by MPCA staff, and information presented in the EAW, the MPCA does not expect significant cumulative effects from this Project.

50. In considering the cumulative potential effects of related or anticipated future projects, the MPCA finds that the Project does not have the potential for significant environmental effects due to related or anticipated future projects.

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

51. 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.

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

<table>
<thead>
<tr>
<th>Unit of Government</th>
<th>Permit or Approval Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPCA</td>
<td>Air Emission Permit Modification</td>
</tr>
<tr>
<td></td>
<td>NPDES/SDS Industrial Discharge Permit Modification (Industrial Wastewater and Stormwater)</td>
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<tr>
<td></td>
<td>Construction Stormwater Permit</td>
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<tr>
<td></td>
<td>Aboveground Storage Tank Permit Modification</td>
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<tr>
<td>State Fire Marshall/ City of Granite Falls Fire Department</td>
<td>AST Notification and Review</td>
</tr>
<tr>
<td>Chippewa County/City of Granite Falls</td>
<td>Building Permit</td>
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</table>

53. 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

54. 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.

55. The following documents were reviewed by MPCA staff as part of the environmental impact analysis for the proposed Project.
On the Need for an Environmental Impact Statement

Granite Falls Energy, LLC – Ethanol Plant Expansion Project

Granite Falls, Minnesota

Findings of Fact

Conclusions of Law

And Order

• Data presented in the EAW data sheet
• Permit Applications (Air Quality, AST, NPDES/SDS)
• Air dispersion modeling report
• AERA
• Water Appropriation Permits issued to GFE by DNR
• EAW for GFE’s original construction

56. This list is not intended to be exhaustive. The MPCA also relies on information provided by the Project proposer, persons commenting on the EAW, staff experience, and other available information obtained by staff.

57. There are no elements of the Project that pose the potential for significant environmental effects that cannot be addressed in the Project design and permit development processes, or by regional and local plans.

58. Based on the environmental review, previous environmental studies, and MPCA 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.

59. The MPCA adopts the rationale stated in the attached Response to Comments (Appendix B) as the basis for response to any issues not specifically addressed in these Findings.

CONCLUSIONS OF LAW

60. 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.

61. 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 Project is expected to comply with all MPCA standards.

62. 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.

63. An EIS is not required.

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

The Minnesota Pollution Control Agency determines that there are no potential significant environmental effects reasonably expected to occur from the Granite Falls Energy, LLC expansion project and that there is no need for an Environmental Impact Statement.

IT IS SO ORDERED

[Signature]
Paul Aasen, Commissioner
Minnesota Pollution Control Agency
Date
2/3/11
LIST OF EAW COMMENT LETTERS RECEIVED


2. Dick Wambeke, Board Chair – Yellow Medicine County, Granite Falls. Letter received January 10, 2011.

3. David Smiglewski, Mayor – City of Granite Falls. Letter received January 10, 2011.


January 4, 2011

Steven Sommer
Project Manager
520 Lafayette Road North
St. Paul, MN  55155-4194

Dear Mr. Sommer

We are writing this letter in support of the expansion of output project for Granite Falls Energy. It is our understanding that with little facilities modification the plant will be able to efficiently increase production from just under 50 million gallons to 70 million gallons. The plant has a proven record of responsible operation and this expansion will allow them to provide needed oxygenate to the blenders market while improving the efficiency of the plant.

We are the electric power supplier for the plant and have first-hand knowledge of their efficient use of electric power and energy over their many years of operation. If they are given the green light to operate at 70 million, output will increase by almost 40%. Under this scenario we are projecting almost no increase in electric power demand and only a 20% increase in electric energy use. This would allow the plant to make even more efficient use of each unit of electric power and energy required to make ethanol.

Of course, we are also in support of the plant expansion for what it means to the economic health of this area. It means much needed good paying jobs for this part of the State as well as the opportunity for area farmers to add value to their corn crop. For Granite Falls Energy, being able to improve efficiency by expanding output will be critical for their continued economic success well into the future.

We are confident that Granite Falls Energy will continue to operate in an environmentally responsible manner with this expansion of efficiency and we wish them continued success.

Sincerely,

Patrick C. Carruth
General Manager
January 4, 2011

Steve Sommer, Project Manager
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Re: Granite Falls Energy, LLC Ethanol Plant Expansion Project EAW Comments

Dear Mr. Sommer:

The Yellow Medicine County Board of Commissioners would like to express our support for the proposed expansion of the Granite Falls Energy, LLC (GFE) ethanol plant. GFE has proven to be an outstanding and innovative ethanol producer over the years. After review of the environmental assessment worksheet, the County Board sees no adverse impacts resulting from the GFE ethanol plant expansion project.

GFE is an important economic asset to Yellow Medicine County and all of western Minnesota. The expansion of GFE will create more demand for area farmers' corn crops while also expanding the production of renewable energy which leads to an overall cleaner environment for everyone.

On Behalf of the Yellow Medicine County Board,

[Signature]

County Board Chair

Cc: Granite Falls Energy, LLC
    Chippewa County
    Renville County
    City of Granite Falls
January 4, 2011

Steve Sommer, Project Manager
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

RE: Granite Falls Energy, LLC – Ethanol Plant Expansion Project
    EAW Comments

Dear Mr. Sommer:

Following discussions at the January 3rd meeting of the Granite Falls City Council please be
advised that the City Council by motion directed that a letter be sent in support of the
proposed expansion of the Granite Falls Energy LLC Ethanol Plant. It is the City of Granite
Falls' understanding that the facility is permitted to increase production from 49.9 million
gallons per year to 70 million gallons per year of undenatured ethanol.

As part of this permitting process includes the completion of the EAW, the City of Granite
Falls acknowledges receipt of the Environmental Assessment Worksheet for the proposed
expansion project. After review of the EAW the Granite Falls City Council sees no adverse
impacts resulting from the ethanol plant expansion project.

Sincerely,

David Smiglewski
Mayor - City of Granite Falls

cc: Granite Falls Energy LLC
January 6, 2011

Steve Sommer, Project Manager
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

RE: Granite Falls Energy, LLC Ethanol Plant Expansion Project EAW Comments

Dear Mr. Strommer,

The Chippewa County Board of Commissioners have reviewed and discussed the proposed expansion of the ethanol plant located in Granite Falls owned and operated by Granite Falls Energy, LLC (GFE). The County Board did pass a resolution authorizing a letter of support be forwarded to your attention for the project.

GFE continues to be an important economic contributor to the producers in Chippewa County as well as surrounding counties in southwestern Minnesota. The increased production of a renewable energy source will have a positive environmental and financial impact for the region.

Respectfully,

Jon Clauson,
Auditor/Treasurer
January 6, 2011

Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194
ATTN: Steve Sommers

Dear Steve:

I would like to comment on the proposed expansion of Granite Falls Energy on behalf of the Farmers Co-operative Elevator Company of Hanley Falls, MN. We are a farmer-owned cooperative with locations in nine communities headquartered in Hanley Falls. We have over 2000 Patron/Owners and currently supply all of the corn to Granite Falls Energy.

Granite Falls Energy is a very important part of this area’s economy and is also a good neighboring business to have. They’ve always appeared to me as a neat, clean and responsible corn processor.

The Farmers Co-operative Elevator Company fully supports Granite Falls Energy’s proposed expanded ethanol production levels. Granite Falls Energy’s corn usage is vital to our area farmers and we also need the plant’s market to grow along with area corn yields.

Feel free to contact me with any questions that you may have.

Sincerely,

Scott Dubbelde, General Manager
Farmers Co-operative Elevator Co.
PUBLIC COMMENTS ON EAW
Proposed GFE Ethanol Plant Expansion Project

Public Meeting
MN West Community Technical College
City of Granite Falls
January 10, 2011

Your EAW Comments!
Please take this opportunity to provide comments on the Granite Falls Energy (GFE) proposed expansion project Environmental Assessment Worksheet (EAW). Please feel free to submit this comment sheet to MPCA staff at the end of the meeting. MPCA will respond to all written comments.

Written comments on the GFE EAW should be addressed to Steve Sommer, Environmental Review and Feedlot Section, Regional Division at the Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, Minnesota 55155-4194. Comments can also be submitted directly via e-mail to steve.sommer@state.mn.us.

The public has until 4:30 p.m. on Monday, January 26, 2011, to comment on the EAW for the GFE project. The MPCA will use these comments to evaluate the potential for significant environmental effects from the project.

Comments:

I attended the Jan 10, 2011 meeting at MN West Tech College.
I want to thank you and the other staff members that came out. I want to give my support for the expansion at G.F.E. They have been very good for our community.

Thanks Again,
Michael Makowski
925 - 15th St.
Granite Falls, MN
56726

RECEIVED JAN 12 2011
January 26, 2011

Steve Sommer  
Project Manager  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, MN 55155

Re: Comments on Environmental Assessment Worksheet for proposed Granite Falls Energy, LLC – Ethanol Plant Expansion Project in Chippewa County

Dear Mr. Sommer:

Xcel Energy, d/b/a Northern States Power, hereby comments on Granite Falls Energy, LLC’s (“GFE”) Environmental Assessment Worksheet (“EAW”) for its proposed Ethanol Plant Expansion Project (“Expansion Project”). Xcel Energy merely seeks to provide relevant information to the Pollution Control Agency, and does not oppose GFE’s Expansion Project or offer any opinion on the level of environmental review appropriate for that Project.

Xcel Energy owns and maintains the Class I high hazard Minnesota Falls dam (MN 00969) on the Minnesota River. The Minnesota Department of Natural Resources (“DNR”) Dam Safety division and Xcel Energy have determined that the dam exhibits several potential structural deficiencies. The dam no longer serves its original purpose as a hydroelectric project and is no longer necessary to provide cooling water for Xcel Energy’s upstream Minnesota Valley Generating Plant. These facts, coupled with considerable operations costs and liability concerns, have led Xcel Energy to plan for removal of the Minnesota Falls dam. Barring a viable offer from some other entity to accept ownership and all liability associated with the dam, Xcel Energy anticipates that it will complete removal in 2012.

Removal of the Minnesota Falls dam will result in lower river levels in the impoundment and reaches immediately upstream of the dam. Through DNR Water Appropriation Permit 2007-0016 and subject to minimum flow requirements, GFE draws surface water from the Minnesota Falls impoundment approximately 1,200 feet upstream of the dam. This draw from the Minnesota River is GFE’s main source of water. The Expansion Project does not appear to require any change to GFE’s Appropriations Permit. (See, e.g., EAW §§ 8, 12, 13, 29.)

The public and GFE in particular, have been notified regarding Xcel Energy’s plans for dam removal. GFE has expressed concern that lowered pool levels resulting from dam removal may affect its ability to withdraw water from the Minnesota River, especially during winter months when the river is subject to freezing.
GFE’s current water intake in the Minnesota Falls impoundment is addressed in several sections of the Expansion Project EAW, including the following subsections within Section 13: Water Sources, Current Water Appropriations Permit, Actual Water Use, and Water Appropriations Permit History. (See EAW at pages 11-12.) The current Minnesota Falls impoundment intake is also discussed in Section 29’s analysis of cumulative potential effects in the subsection entitled Water Appropriation. (See EAW at page 36.) However, the EAW omits reference to the potential removal of the Minnesota Falls dam, which may impact GFE’s water intake.

Thank you for the opportunity to submit these informative comments.

Sincerely

Elizabeth Karels
Xcel Energy Project Manager, Minnesota Falls Dam Remediation Project
Minnesota Pollution Control Agency

Granite Falls Energy, LLC
Proposed Ethanol Production Facility Expansion
(49.9 to 70 million gallons per year)
Environmental Assessment Worksheet (EAW)

RESPONSES TO COMMENTS ON THE EAW


   Comment: The commenter expressed support for the project.
   Response: Comment noted.

2. Comments by Dick Wambeke, Board Chair – Yellow Medicine County, Granite Falls. Letter received January 10, 2011.

   Comment: The commenter expressed support for the project.
   Response: Comment noted.

3. Comments by David Smiglewski, Mayor – City of Granite Falls. Letter received January 10, 2011.

   Comment: The commenter expressed support for the project.
   Response: Comment noted.


   Comment: The commenter expressed support for the project.
   Response: Comment noted.


   Comment: The commenter expressed support for the project.
   Response: Comment noted.


   Comment: The commenter expressed support for the project.
   Response: Comment noted.


   Comment: The commenter provided information on the Minnesota Falls dam and Xcel Energy’s plan for its removal. The commenter did not offer an opinion on the level of environmental review appropriate for the GFE expansion project.
   Response: Comment noted.