



# MICHIGAN TROUT UNLIMITED

Dedicated to the Conservation, Protection and Restoration of Coldwater Fisheries & their Watersheds

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Mr. Michael Bitondo  
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Michigan Department of Natural Resources and Environment  
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## Public Comments Regarding Draft NPDES CAFO General Permit No. MIG019000

Dear Mr. Bitondo:

Thank you for providing Michigan Trout Unlimited with this opportunity to provide comments for consideration in development of the upcoming National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge General Permit for Concentrated Animal Feeding Operations (CAFOs). We also want to thank the Department of Natural Resources and Environment (DNRE) for inviting us and other environmental and conservation organizations to participate in the recent series of Stakeholders Meetings regarding the Draft Permit. For over 50 years, Michigan Trout Unlimited has been devoted to the conservation, protection and restoration of Michigan's coldwater fish and their watersheds. Michigan is blessed with a vast wealth of wonderful and unique trout streams, over 11,000 inland lakes, and the largest sources of cold freshwater in North America - the Great Lakes. These resources are held in the public trust, belonging to every citizen of our state. Every generation has a responsibility to protect and preserve these priceless resources so that generations to come may benefit and enjoy them. Currently, Michigan Trout Unlimited provides coordination and representation for 22 local chapters of Trout Unlimited (TU) with approximately 7,000 members within the state of Michigan. Michigan is the birthplace of TU, which has grown into a nationwide organization with more than 150,000 members organized into about 400 chapters throughout the country.

In recent years, Michigan Trout Unlimited has become increasingly concerned about the potential damage that can occur as a result of the misapplication of manure within watersheds supporting coldwater fisheries. This concern became tragically evident in late July, 2006 when a large amount of fecal material made its way into Tyler Creek near Freeport, Michigan, resulting in a total loss of the fish population along 4 miles of one of the finest trout streams in southern Michigan. Since then, other spills of CAFO or agricultural waste to streams have occurred throughout Michigan, including two spills that occurred within the past several months along the Black River in Sanilac County and along a tributary of the River Raisin in southern Michigan. Both of these spills resulted in fish kills. It is Michigan Trout Unlimited's goal to work alongside the agricultural community to develop long-term solutions to these potential threats which will ensure the viability of both our coldwater resources as well as the surrounding agricultural community. But most importantly, Michigan Trout Unlimited will stand steadfast in our mission to protect Michigan's coldwater watersheds. Michigan Trout Unlimited views agricultural practices that result in fish-kills or impairment of trout and salmon populations and habitats in coldwater watersheds as completely unacceptable. And while we also acknowledge that there are a wide variety of environmental and public health concerns related to CAFO operations, Michigan Trout Unlimited's primary objective is to ensure that waters that have designated uses as coldwater fisheries, as well as the groundwaters and watersheds that feed into them are protected, restored, and allowed to thrive.

We have conducted a review of the Draft General Permit that was issued for public comment and dated January 5, 2010. The following comments are offered to help the Department in making final modifications to the draft permit. The comments are intended to go in the order as they are addressed within the permit with page and/or Part references provided.

1. Starting on page 5 and continuing throughout the draft permit, there are numerous references to information that will be required to either be "kept with" or "maintained in" the Comprehensive Nutrient Management Plan (CNMP), which has generated a significant amount of discussion during the recent Stakeholders Meetings. During these meetings,

representatives of the farm industry came out rather strongly against many of the new requirements. The language currently within the permit was arrived at after lengthy discussion and comment. Michigan Trout Unlimited strongly encourages the Department not to give in to requests that additional information be “kept with” the CNMP rather than “maintained in” the CNMP. The state needs to review this information in making its permit decisions and also for compliance and enforcement purposes. In addition, now that CNMPs are to be included with permit applications, much of the information the new draft permit requests would greatly help the public better understand how an individual CAFO is configured and operated. With this new information, the public will then be able to ask more intelligent questions about issues that may affect the quality of nearby waters. Citizens of the State of Michigan have a right to know that the waters that belong to them are adequately protected, and they have a right to ask intelligent and honest questions of any industry that has the potential to adversely affect the quality of their water. And likewise, such industries have an obligation to respond in a forthright and honest manner.

Michigan Trout Unlimited also believes that additional information could also be maintained in the CNMP if the tools were provided to efficiently handle and transfer them. A spreadsheet could be developed by the Department, similar to those created for municipal wastewater treatment plants that can be given to CAFOs to fill out. These spreadsheets could be used to record information in a collimated format and perhaps, as in the case of manifest slips for CAFO waste recipients, the spreadsheet could automatically print out a manifest slip to give to the recipient, while the operator would be able to view and maintain the data in the spreadsheet. Regardless of how this other information is handled, it is important to note that ALL records kept with or maintained in the CNMP should be made available to the public upon request in the event of a spill or observed violation of water quality standards.

2. Part I.A.4. on pages 5-7 describes the requirements for design of storage facilities. The DNRE should establish a review and construction permit process similar to what is done for municipal and industrial wastewater treatment facilities. The Department should review all plans and specifications to ensure that storage facilities are designed and built in accordance with accepted design standards.

In addition, the DNRE should also develop its own set of design standards for storage facilities here in Michigan in addition to NRCS Standard 313. Again, this would be analogous to how the Department handles municipal wastewater treatment facilities, where the design has to meet the “Ten States Standards” and the EPA Redundancy Requirements, as well as the requirements of the Department’s own checklists. Included with these standards should be a prohibition on above-grade storage facilities that depend on earthen berms. Such berms can eventually fail, where as a storage structure built entirely below grade eliminates this risk. Also, we would request that perimeter drains and monitoring wells be installed around storage structures to ensure liner integrity. These monitoring wells would then need to be adequately sampled and the results need to be reported to the State.

3. Part I.A.4.b.7) on pages 9 through 14 describe the requirements that must be adhered to when applying CAFO waste to fields to protect nearby surface waters. The section goes into great detail describing the methods, restrictions, and agronomic application rates that must be adhered to. If these represent the minimum requirements for protecting nearby surface waters, then how can application of CAFO wastes to frozen fields be allowed (as per Part I.A.4.b.7)e)C) on page 13)? Such applications do not constitute agronomic applications, since no crops are actively growing on the land at these times that could take up these nutrients. As a result, these nutrients are available to pass into the groundwater and eventually into nearby surface waters, threatening water quality and wasting valuable nutrients that should be cycled back to the land. We also question the need for winter applications in the first place, since CAFOs are required to provide 6-months of storage, which should be enough to last through the winter season. If this storage volume has proven to be inadequate, and as a result, winter application of CAFO wastes is at times required, then the minimum storage volume should be increased. Michigan Trout Unlimited requests that the total required storage volume at CAFO facilities be increased by 3 months to ensure that CAFO wastes do not have to be applied to fields outside of the growing season.
4. Part I.A.4.b.7), on page 9 describes the requirements for land application of CAFO wastes and field reviews that are conducted as part of the CNMP. We would remind the Department that the recent decision by the 2<sup>nd</sup> Circuit Court of Appeals requires regulatory review of these CNMPs and field assessments before a permit is issued. The 2<sup>nd</sup> Circuit decision also requires that these documents be open to the public. Michigan Trout Unlimited is also concerned about the provisions within Part I.A.4.b.7)b)E), on page 10 that allow application of wastes to tiled fields, due to evidence showing that phosphorous can solubilize and enter tile drains. Tile drains from fields should be routinely sampled after land application of CAFO wastes to ensure that water quality standards are maintained.

5. A significant amount of discussion at the Stakeholders Meeting revolved around the public notification requirements for new fields as outlined in Part I.A.4.b.7a). As part of this discussion, questions arose from CAFO operators regarding the ability of CAFOs to allow manure to be spread to nearby fields that are neither owned nor leased or rented by a given CAFO. As such, these fields have not previously gone through a public notification process required by all other fields that CAFOs spread their wastes onto. According to the CAFO operators, they are approached routinely by nearby farm owners with requests to have manure spread on their fields by the CAFO operator, often without enough time to undergo a formal public notification process. The public notification requirement for new fields would limit the ability of the CAFO to assist nearby farms and would eliminate an avenue for disposing of some of their “manure to spare”.

Michigan Trout Unlimited strongly encourages the Department to maintain the existing language as written regarding public notification of new fields. We would also like to use this situation as a means of pointing out something that we feel is a fundamental misunderstanding of the permit requirements by many CAFO operators. Simply put, if the requirements of the discharge permit are being met, CAFOs should not have “manure to spare” in the first place. Part I.A.5.d.6) requires the Annual Review and Report to include “*a field specific spreading plan which identifies where and how much CAFO waste will be applied to fields for the upcoming 12 months... The plan must account for all CAFO waste expected to be generated in the upcoming 12 months.*” In addition, CAFO waste storage structures, if properly designed and meeting the volume requirements of Part I.A.4.a.1) should never require rapid or emergency disposal of waste unless chronic or catastrophic precipitation events occur. We would remind the Department that the permit requires that storage structures provide adequate volume to contain “*all CAFO waste generated from the operation of the CAFO in a six-month or greater time period (including normal precipitation and runoff in the production area during the same time period)*” **PLUS** all production area waste from either the 25-year 24-hour or 100-year 24 hour rainfall event, depending on the type of facility, **PLUS** an additional 6 to 12 inches of freeboard volume.

If a CAFO is in compliance with the requirements described within the permit, there should be NO NEED to get rid of “excess waste”, and they should not have “manure to spare”. All of the waste should be allocated a year ahead of time based on agronomic application rates, leaving plenty of time to subject new fields to public notification. And all storage facilities should have at least six-months of operational storage volume which should provide adequate windows of opportunity to dispose of their wastes. If this volume is proving to be inadequate for CAFOs, then the minimum volume requirement should be raised (see #3 above) before any CAFO waste is allowed to be given away at the spur of the moment. If stored and handled properly and in a sustainable manner, CAFO wastes should be a valuable nutrient source, and there should be adequate acreage of land reserved ahead of time to accept all of the waste. As written, the intent of the permit appears to be that all of the manure and waste produced by a CAFO would be “spoken for” or allocated a year in advance. If a nearby farm approaches a CAFO on short notice and asks to obtain manure, they should be placed onto a list of fields that can be applied to the following year and the public notification process should be followed. Otherwise, the nearby farm could purchase their own land application equipment (or hire a contract hauler and applicator) and apply the CAFO waste in accordance with the manifesting process described within the permit. The intent of the permit appears to be to turn CAFO waste into a valuable fertilizer commodity rather than a liability that needs to be disposed of wherever and whenever the opportunity arises. The permit should also have provisions that require CAFO operators or contractors that apply CAFO wastes offsite to be responsible for any discharges that occur from that site.

6. Given the expanded field assessment requirements outlined in Part I.A.4.b.7a) on page 9, Michigan Trout Unlimited also requests that the Department require all fields currently being used for disposal of CAFO wastes be reevaluated based on the new information submittal requirements to ensure that the waters of the State are protected. Public notice should also be required for these fields if not previously given.
7. Part I.A.4.b.7b)A) on page 10 allows for sampling of CAFO waste once per year. Given the fact that storage facilities are required to provide 180 days of storage, it would seem more appropriate to require a minimum of two samples per year, or once per fill and draw cycle from any given storage facility. It is most important that these samples be truly representative of the waste, not just a grab sample from the top 4 or 5 inches of the storage facility.
8. Parts I.A.4.b.7b)C), D), and E) on page 10 describe the type of inspections that are required for fields prior to, during, and after land application with CAFO wastes. Tile line outlets from these fields should be sampled to analyze and verify if the water quality leaving the field is in accordance with water quality standards. These results should be

submitted to the State for review. Fields with drainage that exceeds the water quality standards should be improved to ensure that CAFO wastes do not degrade nearby surface waters.

9. Part I.A.4.b.7)g)B) page 13; we ask that vegetative buffers also should be inspected prior to and after land application to insure that they provide a complete buffer and that no erosion, animal trail or other change has occurred creating a less than 35 foot buffer or connection to the surface water.
10. Part I.A.4.b.7)g)C) on page 13 states that: "CAFO waste shall not be applied to grassed waterways." Grassed waterways are conduits to surface water and the 100 foot setback requirement should also apply in the same manner as any other water course. Grassed waterways and swales that are conduits to surface water should be added to the list of water courses in Part I.A.4.b.7)g)A).
11. Part I.A.5. beginning on page 14 lists the information required to be included with the CNMP. In addition, we suggest that if any fields produced a discharge they should receive special attention in the CNMPs. The CNMP should identify these problem areas and what efforts have been made to remedy the problems.
12. Part I.B.8. on pages 19 and 20 describe the requirements for manifesting waste to entities other than the CAFO that generated the waste. While Michigan Trout Unlimited recognizes that the requirements concerning manifesting are still under development by the Department, we would like to state that we strongly believe that the general permit should be structured to insure that manifested CAFO wastes are applied to soils that have been thoroughly assessed, inspected prior to and after application, or that they are applied at agronomic rates or incorporated within 24 hours as required on lands owned and operated by large CAFO waste generators. The requirements listed under Part I.A.4.b.7) and Part I.A.5. should apply to ANY field that CAFO wastes are applied to, INCLUDING manifested wastes. We believe that CAFO operators should be responsible for all of the wastes generated by their operation in a "cradle to grave" fashion that is similarly applied to other waste generators, or at the very least, recipients of CAFO wastes should be required to meet the same handling and disposal standards as CAFO operators. We believe the potential for abuse within the manifesting process creates a substantial risk to Michigan's natural resources. In addition, though manifest logs are no longer submitted in the CNMP, Michigan Trout Unlimited contends that these logs could be maintained in the CNMP if the Department would develop a simple spreadsheet such as what is done for municipalities. GPS locations and boundary maps of fields used by waste recipients must be provided to allow better tracking of wastes being spread onto each field. Regardless of how these requirements are placed on the recipients of CAFO wastes (through issuing Groundwater Discharge Permits, etc.), the Department is required to insure that Michigan's natural resources are adequately protected.
13. The potential for issuing Groundwater Discharge Permits for fields accepting manifested waste also raises another critical concern for Michigan Trout Unlimited. What assurances do the people of the State of Michigan have that CAFOs with liquid manure systems are not currently contaminating nearby groundwater? In general, CAFOs do not appear to be required to install groundwater monitoring wells around their facilities or land application fields. It has long been understood and accepted by the Department that wastes that are high in biochemical oxygen demand (BOD) such as industrial food processing wastes, can result in leaching of metals from the soil. These reactions can result in the mobilization of various metals such as iron, manganese, and arsenic, to sites down gradient of the application site, and have been known to impair water quality. As a result, the Department has in the past required other industries that apply their wastewater to the ground to monitor groundwater leaving their property by installing groundwater monitoring wells. Given the strong nature of most CAFO wastes, and the fact that the Department already requires other industries to conduct groundwater monitoring at the boundaries of their sites, it would seem that a coherent approach would be to establish similar requirements for CAFOs. In addition, we suggest that perimeter drains and monitoring wells be installed around storage structures to ensure liner integrity and that these wells be maintained with adequate sampling and reporting requirements
14. Part I.B.9. on page 20. Michigan Trout Unlimited takes exception to the language regarding cost effective control measures. Why should the Department be limited in what it is able to require of CAFOs based on the results of an alternatives analysis that in all likelihood would be developed by the CAFO or a consultant that they have retained? Who will make the decision if an alternative is ultimately cost effective or not? This language should be removed.
15. Part I.B.9. page 21. The department should review all plans and specifications for anaerobic digesters being built in the State. These digesters should be designed in accordance with specific design standards. Anaerobic digesters should be required to be operated by licensed operators.

16. Part I.B.10. on page 21 should also state that the Department shall request documents kept at the farm as part of the Permit if a FOIA request for those documents is made to the Department.
17. Part II.A. page 23 For most of the document the reference of a Large CAFO has been changed to just CAFO, however in the Part II, Section A Definitions, the definition is for a large CAFO. This language should be clarified.
18. Part II.A. page 23; the last paragraph indicates that travel lanes to pastures are not part of the CAFO production area. This should be modified. The permit in other areas describes cattle walkways as part of the CAFO production area and this should be the same for so called “travel lanes”.
19. Part II.C.7 on page 27. – The permittee should report all discharges to surface or ground water. It should not be left up to the CAFO to determine if the release was in excess. This would assure that the discharges are monitored by a third party and would be proactive before public becomes involved.
20. Part II.C.8 on page 27 This section seems very confusing. It appears to be trying to blend two separate permit provisions, 1) the requirement for noncompliance notifications, and 2) information on the upset defense. The Department should separate back into two permit provisions, and should probably use existing NPDES permit requirements for both provisions. Further, it is not clear as to what would really constitute an “upset” at a CAFO. This should be well defined to avoid any confusion.
21. Part II.C.9.a.2) on page 28. This section should be modified to include suggestions as to the type of auxiliary treatment types which should be considered. These should include trucking waste to storage borrowed from another farmer or trucking to a municipal waste water treatment plant or other types of treatment.
22. Part II.C.9.e. on page 28. This section appears to allow bypassing during essential maintenance, a practice that municipal wastewater treatment facilities would not be allowed to do. This should not be allowed in the permit. Auxiliary treatment should be explored also in the event of essential maintenance in order to insure that there is now discharge.
23. Part II.C.13. on page 29. This section should be modified to require the permittee to provide the new owner with a copy of the permit.
24. Part II.D.4. on page 30. This provision should be modified to require periodic testing of standby power to insure that it is operational.

We hope that these comments give you an idea of the concerns that Michigan Trout Unlimited has regarding the Draft CAFO General Permit, and that these comments can be addressed in the Final Permit when it is issued. If you have any questions related to these comments, please do not hesitate to contact me by email or phone. Again, Michigan Trout Unlimited thanks you for the opportunity to provide these comments and we look forward to working with the Department in protecting and preserving our State’s coldwater resources.

Sincerely yours,

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