

Responsiveness Summary

General Permit: CAFO – No. MIG010000

The National Pollutant Discharge Elimination System (NPDES) permit was issued and took effect on (copy attached). An NPDES permit may be contested within 60 days of issuance by filing a petition for Contested Case Hearing with the State Office of Administrative Hearings and Rules of the Michigan Department of Licensing and Regulatory Affairs. A petition may be obtained from the Internet at <http://www.deq.state.mi.us/documents/deq-oah-egp0201.dot>.

The draft permit was on public notice from December 19, 2014 through January 27, 2015 with a public hearing held on January 21, 2015. Twelve people completed attendance cards at the hearing and seven spoke. About twelve written comment letters were received via postal mail and at the hearing and about 20 comment letters were received via email (a few were duplicates of hard copies). In addition, the Sierra Club submitted 691 identical emails on behalf of individuals and 52 of those contained some additional, unique comments. While the number of unique comment letters (approximately 30) was relatively small, those letters contained a large number of individual comments. Due to the volume of comments, some comments below are abbreviated or paraphrased.

Below is a summary of comments received during the public notice period and at the Public Hearing regarding the issuance of the Concentrated Animal Feeding Operation (CAFO) General NPDES permit.

- 1. Comment:** The permit needs to be revised to prohibit the land application of CAFO waste on frozen and snow covered ground without incorporation (also known as “ban winter spreading”).

Response: At this point in time, the Department is not in a position to make such a significant change. The Department believes that current permit restrictions provide adequate protections but will monitor the situation and will consider additional restrictions in the future.
- 2. Comment:** We support the continued use of scientific methodology to manage frozen ground application of manure using the Manure Application Risk Index, or MARI.

Response: The Department acknowledges the comment and is continuing with this requirement.
- 3. Comment:** Sample manure more frequently, once a month (more in wet weather), before each application and for more constituents. Records should be submitted to the state.

Response: Manure sampling frequency will remain at one year. Samples must be representative and cannot be timed to skew the results. The constituents required in the draft permit are adequate to determine proper application rates. Analysis for additional components is not necessary and will not improve the accuracy of application rates. Sampling results are kept at the farm and are available to the Department upon request.
- 4. Comment:** Sample soil more frequently, pre plant and post-harvest, for more constituents and to a depth of five feet. Records should be submitted to the state.

Response: Soil sampling frequency will remain at three years. For alternate years reasonable soil nutrient levels can be calculated using quantities of applied nutrients and estimated crop uptake. The constituents required in the draft permit are adequate to determine proper application rates. Analysis for additional components is not necessary

and will not improve the accuracy of application rates. The Department is not aware of any basis for sampling to a depth of five feet. The Department expects that nutrient levels in sub-soils would be lower, would dilute the soil sample, and result in over-application of manure. Sampling results are kept at the farm and are available to the Department upon request. Soil sampling requirements in the permit are based on current Michigan State University (MSU) guidance.

5. Comment: Update references to NRCS, No. 360 and Conservation Practice Standards both have new names.

Response: The references have been updated.

6. Comment: The permit says to correct deficiencies or problems as soon as possible but there should be a time limit of no more than 30 days.

Response: The time frame will remain “as soon as possible”. Department field staff will determine an appropriate time frame for correcting deficiencies. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors causing the delayed correction. The permittee is required to comply with the permit at all times and prevent discharges. Discharge and Noncompliance Reporting is required in the permit and assuring timely correction of deficiencies is part of the Department’s compliance activity.

7. Comment: Do not allow multiple year phosphorus applications.

Response: This will not be changed. Phosphorus applied in accordance with permit requirements is intended to be retained in the soil root zone. When multiple year phosphorus applications are made to soils with soil phosphorus from 75 PPM to 150 PPM, applications in the subsequent year are not allowed.

8. Comment: The 150 PPM phosphorus limit should be lowered to 40 PPM and no more than agronomic rate.

Response: The 150 PPM in the permit refers to a soil phosphorus indicator level where at or above that level CAFO waste applications must be discontinued. Soil phosphorus requirements in the permit are based on previously developed and accepted thresholds.

9. Comment: Michigan has, additionally, many more large CAFOs, medium CAFOs, and small AFOs that are unpermitted. Medium CAFOs must be permitted.

Response: All known large CAFOs are permitted or in the process of being permitted. Medium CAFOs are, by definition, an AFO that has or had a discharge and had to get a permit. All of those are permitted. Medium and small AFOs are not required to obtain a permit and, therefore, are not permitted.

10. Comment: Nearly 10 years ago, DEQ estimated that Michigan had nearly 15,000 acres of land used by CAFOs for manure applications *for the entire state*.

Response: Staff presumes this is a misunderstanding of a slide from a 10 year old PowerPoint presentation that has since been removed from the Department’s website. The slide says the 15,000 acres is the total for 4 CAFOs.

11. Comment: Manifesting should not be allowed. This is far from the cradle-to grave approach contemplated by federal and state environmental protection laws. Manifested waste must be subject to all permit requirements including land application regulations and record keeping.

Response: The cradle to grave approach does not apply to manure and CAFO waste as defined by the draft permit. Manifesting is a viable, legitimate method of CAFO waste management. Manifesting is a method of tracking the destination of the waste as

compared to the federal practice referred to as “distribution and utilization” which provides no tracking of the destination of the waste. The Department added the following restriction to the permit: “CAFO waste shall not be transferred to another person (a recipient as described in Part I.C.9.) where such waste will be surface applied without incorporation to frozen or snow-covered ground during the months of January, February or March”.

12. Comment: Change the word “rainfall” to “precipitation event”. Include the Q12 in addition to the Q24, “If Q12 and/or Q24 is 4...”. Change P to 50.

Response: The intent is to restrict land application if significant rain is predicted, not snow. The word “rainfall” will not be changed. The Department investigated the weather forecast restrictions including the Q12 and the P threshold. It was determined that the current set of restrictions is understood and provides adequate protection.

13. Comment: A significant change must be public noticed and considered a permit modification.

Response: Some significant changes do not demand a public notice. For example, an increase in animal numbers that only results in an increase in the quantity of manifested waste does not need to be public noticed.

14. Comment: The self-reporting discharge requirements of the 2014 Draft Permit allow a lax self-policing system.

Response: The entire NPDES permit program is operated as a self-monitoring & self-reporting program and has been successful in evaluating compliance in the state for forty years. No government has the resources to monitor every facility on a frequent, regular basis. Facilities are required to monitor themselves and report certain issues. The Department does periodic compliance inspections to assure, among other things, facilities are conducting monitoring in accordance with their permit.

15. Comment: The permit needs to account for changes in technology such as digesters and livestock recycling programs.

Response: This is a general permit. It is not intended to cover all situations. Special situations will need to be covered by an individual permit. However, the general permit contains language applicable to digesters.

16. Comment: Increased monitoring and enforcement of violations regarding groundwater is required. The groundwater monitoring should require up gradient and down gradient monitoring wells for each CAFO, and regular reporting that is available to the public.

Response: The permit is intended for the protection of surface water quality. Groundwater permits are required for most CAFOs once they reach a certain size.

17. Comment: Track the efficacy of manure management systems that are now in place, and implement a process to identify groundwater pollution. All CAFO permits should include groundwater protections including the requirement for monitoring of groundwater in particular around the barns and lagoons.

Response: All new CAFO waste storage structures (WSSs) must be designed and constructed to meet NRCS Practice Standard No. 313. Existing WSSs must be shown to meet NRCS No. 313 or shown that they provide equivalent environmental protection. The permit is intended for the protection of surface water quality including the proper storage of wastes.

18. Comment: Sampling of waste, surface water and groundwater must include pharmaceuticals and/or hormones.

Response: The evidence and data are not sufficient for us to require such monitoring by CAFOs, WWTPs or other sources. In addition, we have no method of interpreting the results, however, research into this subject is continuing.

19. Comment: Water withdrawal must be considered by the permit. Limit the number of animals located over an aquifer. Charge CAFOs for their water use. Track groundwater use.

Response: The permit is intended for the protection of surface water quality. It is not a viable venue for regulating water use. Other laws in Michigan cover water use including Part 317, Groundwater Dispute Resolution and Part 327, Water Withdrawal Legislation..

20. Comment: Do not allow application to no-till fields or perennial crops. All manure must be incorporated within 24 hours.

Response: The permit requires that such applications shall not result in runoff of wastes to waters of the state. Application to no-till fields or perennial crops is an acceptable practice when done in a manner that will not result in an unauthorized discharge.

21. Comment: Deletion of: “overflows causing washout, collapse of storage structure dikes, side walls are prohibited discharges” is nonsensical.

Response: The listing of only one of many possible prohibited discharges was determined to be too narrow.

22. Comment: Date to attain six months’ storage “may” be specified instead of will be specified. That change should not be made. Many “will”s have been downgraded to “may”s, leaving no real guidance to anyone, the Department or applicants.

Response: This refers to compliance dates included in Certificates of Coverages issued to individual CAFOs. Most CAFOs do not need a compliance date to attain six months storage because they already have six months storage. That is why it says “may” instead of “will”. In this case, and in other situations, the Department evaluates the specific situation and determines if a compliance date is needed. If the permit says “will” then the Department is compelled to include a date whether one is needed or not. The final permit continues to say “may”.

23. Comment: Do not eliminate the certified operator requirement. If no certified operator is necessary, some basic education requirements should be required to ensure this process is being carried out as responsibly as possible.

Response: The legislature eliminated the certified operator requirement. The Department cannot impose a requirement contrary to state law.

24. Comment: CAFOs must have six-months of storage and structures that meet NRCS 313 prior to being permitted. An Individual Permit should be required if basic standards are not in place.

Response: The permit specifies WSSs construction standards. Issuance of a permit is not guaranteed. The Department recommends that permit applicants get their permit first before they spend significant funds. New CAFOs and existing AFOs expanding to CAFOs must have six-months storage before they become a CAFO and for how ever many animals they have on site at any given time. If the Department finds an existing CAFO that has somehow avoided permitting they are given time to attain six-months of storage. They need to be put under the permit as soon as possible and permitting will not be held up while they construct storage. Any new WSSs at any CAFO must be designed and constructed to meet NRCS Practice Standard No. 313. In addition, time is allowed for newly permitted CAFOs to evaluate their existing WSSs and either show they meet NRCS No. 313 or modify them to meet NRCS No. 313. Under the CAFO general permit issued in

2010, CAFOs were required to either document that their WSSs were constructed to NRCS No. 313 standards or demonstrate environmental performance equivalent to NRCS No. 313. That process has been completed. Individual permits are sometimes used for unusual or unique situations.

25. Comment: “New swine, poultry, and veal facilities with contaminated areas of the production area exposed to precipitation, including waste storage structures, are not eligible for this permit. New means populated after January 20, 2009.” This is confusing and leaves us wondering about new swine, poultry, and veal facilities. All CAFOs of all types should be subjected to oversight in the state.

Response: All CAFOs are subject to oversight and must have permit coverage. New swine, poultry & veal CAFOs that have contaminated areas of the production area exposed to precipitation, including waste storage structures, do not qualify for the general permit and must obtain coverage under an individual permit.

26. Comment: Climate change is already bringing us more extreme storm events, and this should be taken into account to prevent a future storm-related disaster.

Response: Climate change is accounted for in the permit in several ways. In addition to six-months operational storage volume, CAFOs must maintain an emergency volume for big storms plus a freeboard volume. If WSSs fill up faster, then they must be emptied more frequently. The permit also has land application restrictions based on weather forecasts and limits applications during rain and to saturated ground.

27. Comment: The demonstration of environmental performance equivalent to NRCS 313 should be required to be submitted to the Department, reviewed, and approved, which is not specified.

Response: The permit requires a professional engineer to sign documentation that WSSs meet NRCS No. 313 and that documentation must be submitted to the Department or, where that cannot be provided, the permit requires demonstration of equivalent environmental performance by a professional engineer and that demonstration must be submitted to the Department. All submittals are reviewed by Department staff. If deficiencies are found, they must be corrected. The requirement to use a professional engineer assures that the demonstrations will be done correctly.

28. Comment: Some numbering, some references and the table of contents are incorrect.

Response: The table of contents was re-built before the permit was issued. That information was in the public notice document. Numbering and references were reviewed also, and corrected if necessary.

29. Comment: The Conservation Practices section should require the applicant to state specific practices that the state will accept. What is the verification process the state uses to ensure compliance with NRCS Conservation Practices? This is much too loose. The DEQ should create a report form that all CAFOs must use for consistency, and specifies the practices.

Response: The permit requires that practices used must be listed in the CNMP. The Department will accept any appropriate practices and will review those at the time of inspections. The Department provides a CNMP template that CAFOs may use (and many do) but its use is not required. Other CNMP formats are acceptable as long as they contain all the necessary information.

30. Comment: The state should list what practices are required for compliance with the Chemical Disposal section.

Response: It's the responsibility of the CAFO to determine what practices are best for their operation. Those must be identified in the CNMP and are reviewed by Department field staff.

31. Comment: Use of Daily Land Application Record DEQ forms should be required.

Response: The use of this form is required.

32. Comment: Setbacks should be 500' instead of 100' and required for wetlands also.

Response: The 100' setback is adopted from US EPA rules and US EPA has determined that 100' provides adequate protection when considered in addition to other restrictions & prohibitions regarding land application. The Department has not obtained any evidence that a larger setback would be more protective of water quality. Setbacks for wetlands are required if they are considered ditches that are conduits to surface waters or surface waters except for up-gradient surface waters.

33. Comment: Non-Production Area Storm Water Management. Storm water is supposed to be addressed, but this permit does not do a very good job. This section needs to have requirements explicitly stated.

Response: Non production areas at CAFOs that would be covered by this section are rare and the Department cannot predict ahead of time which practices might be appropriate.

34. Comment: Expiration and Reissuance. This is unnecessarily convoluted. All authorization should expire on April 1, 2020. The applicant should be responsible for submitting a new GP application. The permittee should not be able to operate under an expired permit.

Response: Applicants are responsible for submitting new general permit applications. However, they cannot do that until the permit is reissued. The Department makes every effort to reissue permits in a timely manner but that does not always happen due to staff and workload limitations. If the Department does not provide the necessary permits and forms in a timely manner, then permit coverage is extended beyond the expiration date. State law specifies that for any license (permit) holder who makes timely application for reissuance, their permit coverage continues indefinitely until the state takes final action on their application, even if the permit is expired. This is specified in the Administrative Procedures Act.

35. Comment: Water Quality Impaired Waters. "...the permittee shall complete the following actions within 15 months...". It should be 12 months.

Response: 15 months is to allow for a one year cycle to evaluate operations and then have time to prepare the report. A shorter time frame may result in an incomplete evaluation.

36. Comment: Correct the definition of Department from DNRE to DEQ.

Response: Corrected.

37. Comment: Dates designating a NEW CAFO are inconsistent. One section says "New means populated after January 20, 2009" but it says in the definitions it refers to January 30, 2004.

Response: These dates come from federal law. The 2009 date only applies to swine, poultry, & veal facilities while the 2004 date applies to all others. That has been clarified in the permit.

38. Comment: Vegetated Buffer definition should specify the use of native perennial vegetation.

Response: CAFO operators should be able to choose which plants are best for a specific buffer. A non-native (and non-invasive) species may be the best option at a specific location. Native species are an option in some cases and the Department encourages their use when appropriate.

39. Comment: Rainfall event size should be reviewed against the increased frequency and intensity of rain events brought upon by Climate Change.

Response: The Department considered other rainfall data but determined that using the data currently specified in the permit was adequate. The use of newer rainfall data will be considered for future permits.

40. Comment: Test Procedures and Instrumentation. Both of these sections should specify how often maintenance procedures should be performed.

Response: Part II, Sections B, C, D, & E is collectively referred to as the “boilerplate”. Boilerplate is extensively based upon federal requirements and is not easily changed.

41. Comment: Even when the current NPDES permit guidelines are met, biological integrity is compromised through the proliferation of antibiotic resistant bacteria and genetic material and therefore, the CWA is violated.

Response: US EPA has determined that the permit meets federal rules, which have been promulgated under the CWA (Clean Water Act). Therefore, if the permit is met, then the CWA is not violated.

42. Comment: All fecal coliform bacteria including E. coli should be tested for antibiotic resistance and a minimum inhibitory concentration for resistance should be reported with other TMDL data. The prevalence of antibiotic resistance genes such as Tet(W) should be tested for and presence reported.

Response: Testing bacteria for antibiotic resistance, including genetic testing, is currently beyond the scope of the NPDES program. It is also beyond the scope of the type of studies conducted by the Department. It is currently in the research phase as is being conducted by the commenter. The Department does not believe that the issue of antibiotic resistance bacteria has reached the regulation phase. The Department believes it is still in the research phase. If and when this issue reaches the regulatory phase, then all discharges need to be considered, including municipal wastewater treatment plants and not just CAFOs.

43. Comment: No CAFO waste shall be applied to any field or land that is underlain by drain tiles, clay tiles or any conduit manmade or natural that has the potential to discharge infiltrated water to surface waters. CAFO wastes have been linked to the proliferation of antibiotic resistant bacteria. Underdrains have been identified as point source discharging conduits from which potentially harmful antibiotic resistant bacteria and resistance genes enter surface water. Therefore, NPDES permits that control only nutrients may address the “chemical” integrity of the CWA objective but fail to address the “biological” integrity.

Response: The permit prohibits any dry weather discharge of CAFO waste and any wet weather discharge that causes or contributes to a violation of water quality standards including discharges through drainage tiles. NPDES permits, including CAFO permits, are designed to regulate the discharge of all pathogens, not just certain types. Because CAFO permits are designed to regulate the discharge of pathogens, including through tile lines, CAFO permits address biological integrity of waters of the state. For example, if there is a discharge from a land application site of a permitted CAFO and we measure a level of E. coli in the receiving stream that violates water quality standards, then that is a permit

violation. Permit requirements in totality are designed to keep nutrients in the root zone and out of tiles.

44. Comment: Only the elimination of feedlot manures as fertilizers can finally address the requirement set forth in the CWA to "maintain the chemical, physical, *and biological* integrity of the Nation's waters." Based on the science available at this time, citizens will be well served by such a ban which would give time for careful study.

Response: As previously stated, the Department believes that this issue is still in the research phase. Imposing a ban on the land application of manure during the research phase, a ban that may never be justified, is unreasonable. It would be a significant, and possibly unjustified, burden on the industry. Manure nutrients would then have to be replaced with commercial fertilizers on farm fields. Soil quality would be harmed by the loss of organic material in manure.

45. Comment: Soils which have not been exposed to manure applications in recent history typically gave a positive Tet(W) ARG incidence of roughly 5 - 7%, whereas sediments taken from drainage ditches which directly receive water from underdrains of impacted fields show an incidence of over 80%.

Response: This is a good example of the results of research. The next step for researchers would be to determine if this is problem and, if so, does it need to be addressed? Additional research to help answer those questions would be reviewed by the Department.

46. Comment: A change specifies that construction of new animal housing or new waste storage facilities constitutes a significant change, necessitating the submission of the revised portions of the CNMP. A significant change already includes a trigger for CMNP revisions with an increase in animal numbers by 10% or greater. If new animal housing were to be added that increased animal numbers, the 10% trigger would result in a CNMP revision. If new animal housing were to be added without an increase in animal number, there should be no need to revise the CNMP. In either case, there should be no need to notify the department of new animal housing construction.

Response: Department staff have found changes during inspections. New or expanded barns or storage, or other changes are found that, in some cases, should have resulted in a revision of the CNMP. This results in a compliance or enforcement letter. Each change needs to be evaluated to determine if a revision of the CNMP is necessary. An addition of animals that is less than 10% may still trigger a need for CNMP revision. If a change as described in the new language does not trigger a need to revise the CNMP then a brief note to the Department explaining the change, is not unreasonable. If a CNMP revision is required then that is important for permit compliance and water quality protection.

47. Comment: The permit already states that CAFO waste storage structures must meet 2014 NRCS 313 standards or provide environmental performance equivalency. The construction of new waste storage facilities, which are already required to comply with NRCS 313 standards, should not require a CNMP revision, nor should written notification be required prior to construction.

Response: Again, Department staff have found new structures during inspections. A new structure can result in changes to manure management practices that trigger a need to revise the CNMP. If new storage does not trigger a need to revise the CNMP then a brief note to the Department is not unreasonable. If a CNMP revision is required then that is important for permit compliance and water quality protection.

48. Comment: Proposed language requires written notification to DEQ before alteration of waste storage structures. No mention is made of the scope or type of alteration. Minor facility

improvements that do not deviate from NRCS 313 standards are thereby subject to new and needless reporting requirements. Without specific guidelines regarding alternations, the proposed language is confusing and adds an unnecessary reporting requirement.

Response: This is a judgment call. Minor alterations, especially in compliance with the permit such as re-setting the depth gauge or removing woody growth, do not need to be reported. As we move forward with this new requirement, the Department may provide a guidance document describing alterations that trigger the reporting requirement.

49. Comment: The discharge of substances that trigger increases of microcystin has to be reduced for Lake Erie to be healthy again. Estimates say that the amount of phosphorus that has to be reduced is 45%. Please revise these regulations to include a requirement to reduce manure runoff in the Lake Erie watershed by 45%

Response: The Department is carefully studying the Lake Erie situation in detail. No conclusions have yet been reached. As the study moves forward we hope to learn what actions may be needed to improve Lake Erie water quality. We don't yet know how much phosphorus is being contributed to Lake Erie by CAFOs in Michigan. We do not yet know the effect of phosphorus inputs have on Lake Erie versus other factors that affect lake ecology.

50. Comment: The CAFO General Permit should begin to phase out all field applications of untreated animal wastes. CAFO animal wastes should be treated like human waste, in a municipal grade treatment system. Untreated animal waste is just as harmful as untreated human waste.

Response: Human waste contains human pathogens. It is treated to significantly reduce or eliminate human pathogens. Animal manure does not contain human pathogens and is much less dangerous in that regard as compared to human waste.

51. Comment: Waste Storage Structures - We support the changes to this section. This section includes a requirement for CAFOs to report to DEQ the date on which their manure storage structures have a minimum of six months of storage. We recommend the DEQ develop or improve a process to remind producers of this requirement and work with them on compliance assistance. We also recommend outreach, education, and compliance assistance on all new requirements including language clarifying recordkeeping for manifest of manure; for nutrient credit calculation during land application; for a revision of the CNMP due to the construction of new animal housing or waste storage facilities; for removal of woody vegetation from storage structure berms; and, for new requirements for CNMPs to include visual inspection records for piping, transfer lines, and runoff management devices.

Response: The Department will implement appropriate outreach, education, and compliance assistance for all changes to the general permit. Changes may be discussed in the letter that will be sent to all CAFOs covered under the general permit providing them with re-application instructions. As always, the Department is happy to provide compliance assistance when necessary. It is much preferred that permittee's are in compliance with their permit as opposed to taking progressive enforcement actions.

52. Comment: We support language changes that allow beneficial reuse of clean diverted storm water; the addition of the option for producers to use either of two methods to calculate phosphorus content for land application; and, removal of the requirement for Operator Certification.

Response: The first two changes were made to provide CAFOs some additional flexibility in their operations and the certified operator requirement was eliminated by a new state law.

53. Comment: Every permit is now defaulted to three (3) years after the COC (for compliance with storage structure design and volume requirements). Three years is much too long without knowing the specifics of each operation.

Response: The permit says up to three years, however, compliance dates are implemented in individual certificates of coverage on a site-specific basis. In the past, some have been less than three years. Possible activities necessary to achieve compliance may include application for and obtaining funding, developing an appropriate design, bidding for construction contracts, waiting for contractor availability, and waiting for construction season. The timing of all of these events can take several years.

54. Comment: Previously existing structures should be required to show their compliance with 2014 rather than only 2005.

Response: All existing structures have been evaluated as necessary to meet the appropriate NRCS standard. The Department will not repeat that process every time a new standard is issued. The 2005 and the 2014 standards are environmentally similar and both provide acceptable resource protection.

55. Comment: Under “Field by Field Assessments” the line “All assessments shall be kept in the CNMP...” should be moved up. Now it seems to read as if these assessments only apply to new fields

Response: The change has been made.

56. Comment: Chemicals, antibiotics, and other harmful substances should be required to be removed through treatment before the wastes are applied to farm fields

Response: CAFOs may treat their waste if they wish; however, there is insufficient information available to justify a requirement to treat CAFO wastes.

57. Comment: DEQ must ensure that CAFOs are required to comply with scientifically demonstrated standards and practices that will protect our lakes, streams and groundwater from devastating pollution.

Response: The permit contains standards and practices that are designed to protect the designated uses of Michigan’s water resources. The Department inspects and monitors CAFOs to verify permit compliance and takes corrective actions when violations are found.

58. Comment: All CNMP providers for CAFOs should also be CAP 102 certified CNMP providers. For a CNMP to qualify for cost sharing through NRCS, it must be developed or approved by a CAP (conservation activity plan) certified CNMP provider.

Response: A CAP certified CNMP provider would meet the definition in the permit for a Certified CNMP Provider. If a CAFO wants to qualify for cost sharing then they need to hire the appropriate provider.

59. Comment: Clean sand delivered for use as a bedding material should be excluded from the definition of “production area waste”. This is only for clean sand that is brought in for bedding. There are no contaminants or nutrients in this sand prior to being used for bedding.

Response: This change has been made, however it has been clarified that it only applies to new sand, not washed sand previously used as bedding. Also, runoff from clean sand would continue to be regulated under the “Non-Production Area Storm Water Management” section of the permit.

60. Comment: Inspections - some transfer lines are underground and it sounds like they may have to be uncovered to allow for visual inspections. How would underground lines be inspected? Maybe only if a problem is suspected, or indicated based on above ground inspections? There really isn't any good way to inspect them other than sending a camera down the line.

Response: Underground transfer lines do not need to be uncovered or routinely inspected with a camera. However, above ground areas that would show or indicate that something underground has failed or malfunctioned, need to be kept visible. Only if a problem is indicated or suspected would additional actions such as excavation or camera inspection be warranted.

61. Comment: Under "Prohibitions" strike out the last 7 words "Potential for manure movement from the field." since that is what MARI is supposed to show already. That's redundant. Replace the word "represents" with "is" since if it represents a low risk, it is a low risk.

Response: This new language is only a clarification of what is in the technical standard and, therefore, it may seem redundant but is necessary. The word 'represents' has been replaced with 'is'.

62. Comment: For the new annual report requirement "including waste to be transferred under manifest" - this amount may be unknown at the time of submitting the annual report. Maybe add "if known, or under contract"

Response: The spreading plan should be a best estimate of how all CAFO waste will be utilized in the upcoming year. The intent is that all CAFO waste should be accounted for, not just land applied waste. If part of the waste will not be land applied, then it still needs to be accounted for in the spreading plan. The spreading plan is only a best estimate. It can change including the estimated amount of manifested waste.

63. Comment: Getting notification of new construction or alteration of existing storages will be tough, since even I (farm consultant) don't always get notification of changes or new storages. That is going to be a learning curve for farmers.

Response: Anything that changes regulatory requirements will be a learning curve, including this item. The purpose of this is to foster good environmental compliance and to allow for permit compliance assistance. Perhaps the Department will develop a brief document to explain what may change for farmers in regards to their permit.

64. Comment: All CAFOs need to be held responsible for their waste. Liquids on bare soil quickly reach water, either on the surface or below ground. The dramatic increase in weed and algae growth in our inland lakes testifies to the change in agricultural practices.

Response: CAFOs are held responsible for their waste. Except in certain circumstances, land applied wastes must be incorporated within 24 hours or injected in order to keep the applied wastes in the crop's root zone. In cases where wastes are allowed to be surface applied there are restrictions to prevent discharges. There are many factors that may be affecting aquatic weed and algae growth, agriculture practices are only one possible factor.

65. Comment: Please protect the public from CAFO waste. We learned long ago not to pour raw sewage directly in our surface water. We should not dump it on our soil, either. Raise the livestock on pasture in the first place to reap the benefits of the nutrients in manure without contaminating our water.

Response: CAFO wastes are not raw sewage. Raw sewage is human waste and has a particular threat to human health. The practice of using animal manure as fertilizer has existed for centuries and has value. Manure deposited in pastures is not regulated under the permit.

66. Comment: Require CAFOs to use technologies such as aerobic composting or anaerobic digesters before they discharge. Require effective & inexpensive natural controls for the waste treatment problem – such as the use of applied mycology - fungi that consume the waste and converts it into harmless & even useful by-products.

Response: CAFOs are welcome to use applicable technologies but the Department will not require their use. The use of some technologies may require an individual permit. If a CAFO wishes to have a direct discharge to surface waters then a treatment system to protect water quality standards will be needed as will an individual permit.

67. Comment: Tighten both the regulations and the frequency of monitoring of existing CAFOs and require even stricter regulations for any new CAFOs would go a long way towards "Pure Michigan".

Response: At this time, the Department believes current regulations are successful and do not need to be more restrictive. CAFOs are inspected by the Department on the same schedule as other NPDES permittees. Such schedules are developed to best utilize staff time. If there are problems, a particular CAFO may be visited more often. The Department evaluates it's programs and implements improvements.

68. Comment: There should be a minimal distance that manure can be spread from waterways and permanent berms planted to help protect the water source from contamination.

Response: The permit contains setbacks to any ditches that are conduits to surface waters, surface waters except for up-gradient surface waters, open tile line intake structures, sinkholes, or agricultural well heads. The setback is 100 feet or that may be reduced to a 35 foot vegetated buffer. Those buffers have been shown to be protective of surface waters and are established in federal rule.

69. Comment: We need to do everything we can to protect the Great Lakes from potential disaster. Companies cannot fulfil the promise that their methods are fool proof.

Response: The Department agrees that the Great Lakes are a very important resource that needs to be protected and the CAFO permit does that. It's true that nothing is fool-proof but permit requirements are reliable in protecting water quality.

US EPA Comments

70. Comment: The manifest form needs to be revised to include more detailed nutrient analysis.

Response: Permit language is acceptable. The manifest form has been revised to provide the correct information.

71. Comment: MSU documents and bulletins need to be made available on the state website.

Response: The MSU bulletins have been made available on the Department's CAFO webpage.

72. Comment: The last sentence of item I on the CAFO application page (Section V) needs to be deleted because it is incorrect.

Response: The sentence has been deleted.

73. Comment: "Floodwaters" was deleted in one instance but not in another. This should be consistent. Either keep both or delete both.

Response: Both have been deleted.

74. Comment: The permit needs to include a definition for “Certificate of Coverage”.

Response: The definition has been added.

75. Comment: The public notice should specify the field and site specific permit terms that are included in the CNMP.

Response: The public notice documents will specify the terms that are included in the CNMP.

Other Changes

The requirement that new fields may not be used until notified by the Department was changed to allow use of new fields eighteen days after submittal of the request unless notified otherwise by the Department.

Prohibit the application of manifested waste to frozen and snow covered ground without incorporation during January, February and March unless the recipient follows the winter spreading technical standard.

The permit allows an annual rate of CAFO waste application that does not exceed the N fertilizer recommendation (removal value for legumes) for the first crop year grown after the CAFO waste is applied. The following clarification was added to reflect current practice – “unless samples or other relevant data shows additional N is needed for or will be beneficial to the crop. Documentation justifying additional N must be kept with the farm’s CNMP”.

Prepared on April 30, 2015 by Mike Bitondo, Permits Section, WRD, DEQ