STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

REPORT OF PROCEEDINGS ON THE PROPOSED RENEWAL OF THE STATE GENERAL PERMITS FOR ANIMAL FEEDING OPERATIONS

PUBLIC MEETING
NOVEMBER 12, 2013
STATESVILLE, NORTH CAROLINA

PUBLIC MEETING
NOVEMBER 14, 2013
KENANSVILLE, NORTH CAROLINA

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ATTACHMENTS

Attachment 1 – Existing State General Permits
Attachment 2 – Draft Proposed State General Permits
Attachment 3 – Brief of Proposed Changes in Draft General Permits
Attachment 4 – Public Hearings Press Release and Fact Sheet
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I. BACKGROUND

North Carolina's existing State Animal Waste Management System General Permits are due to expire on September 30, 2014. Copies of these existing permits are contained in Attachment 1. Accordingly, the Division of Water Resources (Division) has drafted new, proposed State General Permits to replace the current permits. These draft permits will cover animal feeding operations according to the requirements of G.S. 143-215.10C and 15A NCAC 02T .1300.

The animal waste management systems to be covered by these draft permits include the collection, transfer, treatment, storage, and application of animal waste. Animal waste is collected using a variety of methods including flush systems, pit recharge systems, barn scraper systems and scraped surface lots. The waste is transmission via channels or pipes to anaerobic lagoons or storage ponds to treat and store the waste. Irrigation equipment or waste spreaders are used for application of the animal waste at agronomic rates. Animal waste is usually applied using permanent or mobile pumps and piping to traveling gun and reel systems but could also use a solid-set irrigation system, transportation and application vehicle system such as a honey wagon, and other forms of application systems for the animal waste.

North Carolina's Animal Waste Management System General Permits provide a permit option for facilities not covered by the federal NPDES permit and that have at least 100 confined cattle, 250 swine, or 30,000 poultry with a liquid waste management system. Facilities not covered by the federal NPDES permit and have less that 100 confined cattle, 250 swine, or 30,000 poultry with a liquid waste management system are deemed permitted under 15A NCAC 02T .1303 unless it experiences significant problems with its waste management system. In that case, the Division Director may require the facility to apply for coverage under a general permit or an individual permit.

In accordance with applicable requirements, the Division has proposed to renew the existing general permits with draft, revised Animal Waste System Non-discharge General Permits. The proposed permits have been revised for the following operations:

- General Permit No. AWS100000 – Swine Operations
- General Permit No. AWS200000 – Cattle Operations
- General Permit No. AWS300000 – Poultry Operations with Liquid Waste

These draft permits were sent to public notice on October 28, 2013. The public comment period closed on Friday, December 6, 2013. The proposed permits are scheduled for issuance on October 1, 2014. Copies of these draft permits are contained in Attachment 2.

II. PROPOSED CHANGES IN THE REVISED PERMITS

The proposed draft general permits that were sent to public notice contained many of the same requirements included in the existing permits. The majority of the changes from the current permit are structural and grammatical in nature, to organize the conditions and remove some redundant language. Some changes were made to better protect the State's water resources in accordance with applicable Statute and Administrative Code. The list of new or modified conditions is as follows:

- Corrected the regulatory citation for State Veterinarian's authority to dictate proper mortality management.
- Corrected the regulatory citation for operators of Animal Waste Management Systems.
- Cleaned up language to make clear that calibration is required at least once every two years.
- Soil sampling is required at least once every three years on all fields upon which animal waste is applied.
- Waste sample submitted for analysis should represent the waste as applied – i.e., if lagoon is agitated for waste application, the sample should be taken when agitated rather than prior to agitation.
- Regional office notification is required if waste levels rise to the structural freeboard zone. A 5-Day Plan of Action must be submitted within two days that outlines steps to lower waste levels below the structural freeboard.
- Cattle operations that drop below the permitting threshold of 100 confined cattle for three years or more to request permit rescission prior to closure of waste lagoons/containment basins.
- Limits the distribution of animal waste for personal use to ten cubic yards per year.
- Updated citation to current NRCS NC Conservation Practice Standards.

A copy of a short handout briefly describing the proposed changes to the general permits, which was provided by Division staff at the public meetings, is contained in Attachment 3.

III. THE PUBLIC HEARINGS

Pursuant to NCGS 143-215.4(b)(1) and (2) and 15A NCAC 02T .0108, the Director of the Division of Water Resources determined that it would be in the public interest to conduct public hearings to receive all pertinent public comment on whether to issue, not issue, or modify the proposed general permits. Jon Risgaard, the Division's Non-Discharge Permitting Unit Supervisor, and Evan Kane, the Division's Groundwater Planning and Environmental Review Branch Chief, served as hearing officers. The hearings were conducted on November 12 and 14 in Statesville and Kenansville, respectively. A Fact Sheet and Press Release, which notified the public of the hearings and provided an overview of the revised general permits, are contained in Attachment 4. Approximately forty-six people attended these meetings and, of these, five individuals chose to present oral comments regarding the draft general permits.

IV. THE ORAL COMMENTS

Five individuals chose to make oral comments at the public hearings. A summary of the oral comments are provided in this document along with the corresponding responses to each comment. Division Staff prepared responses for each comment and used feedback from the Hearing Officers to ensure that permit relevant public concerns were addressed. Written transcripts of all the comments received at the two meetings are contained in Attachment 5.

Comment 1: I do not feel that the calibration requirement should be included in this permit for two reasons. First, to apply waste at agronomic applications; you must recalibrate every field you apply to because every field has a different requirement. Also, every waste analysis changes, so you must recalibrate to meet the requirement of the waste to apply the waste at the proper agronomic rate. It is redundant to recalibrate every two years and have it in the file because it's a useless calibration.
Secondly, the municipal applicators which hold surface irrigation system permits and land application permits for residual solids are not required to have that every two year calibration. Requirements for the various operators should be consistent.

Response: Calibration of waste application equipment is essential to ensure that waste is being applied uniformly and at the rate intended. Animal waste is applied using various types of equipment that may or may not be adjusted at each application. Field Calibration Procedures for Animal Wastewater Application Equipment can be found on the following NC State website:
http://www.bae.ncsu.edu/topic/go_irrigation/wastewater.php

Calibration requirements are consistent with the calibration requirements for other permitted wastewater facilities. Municipal and Industrial Wastewater applicators are required to calibrate irrigation and waste disposal equipment at least once every permit cycle as a permit condition. Land application of residuals permittees must include equipment calibration and maintenance schedules in their Operation & Maintenance Plan, which is incorporated into their Permits.

Comment 2: We would oppose any additional changes to the permits that would make the permits more stringent. We would also oppose any additional changes that would make compliance with the permits more costly or burdensome to farmers.

Response: The changes made in the Permits submitted for review are necessary for protection of water quality. The only changes made in finalizing the Draft General Permits were in Conditions III.15-17, see Comment 13.22. These changes to the Permit language do not make the Permits more stringent, costly, or burdensome.

Comment 3: We request that the Division ensure through appropriate means that cattle and dairy farmer seeking permit rescission without waste structure closure be fully informed. It is particularly important that farmers understand that once the permit is

rescinded, the farm will not be able to go above the threshold of 100 cattle in confinement without having to install substantial upgrades at their facilities. It is important that farmers are aware of all of the ramifications of their permits being rescinded before taking this step.

Response: Division staff will educate permittees of all the potential consequences of permit rescission prior to issuance.

Comment 4: In Section I.8, setbacks for application, 100 feet from any well - that is an inadequate protective setback and want much further setbacks from property boundaries and occupied dwellings as well. Our concern is in fact that these wastes could be mobile in groundwater. Given some of the evidence of contamination that has shown up in voluntary monitoring program that some of these operations applied, I think there is reason for concern and need to make those setbacks greater.

Response: Setbacks for the construction of water supply wells are established in Administrative Code. 15A NCAC 02C .0107(a)(2) Standards of Construction: Water Supply Wells requires a minimum 100 foot separation for industrial or municipal residuals disposal, wastewater-irrigation sites, animal feedlots, or manure piles. Additional setback requirements for other non-discharge disposal facilities are established in 15A NCAC 02T .0706 and 15A NCAC 02T .1006. These rules require a 100 foot setback of wastewater irrigation sites and residuals disposal, respectively, from a well. The Ninth Senate Bill 1217 Interagency Group Guidance Document, Appendix 8.1 states that the required minimum distance from the outer perimeter of the waste application area to a well is 100 feet. Based upon current regulations sited above, changes to setbacks from wells should be addressed through the rule-making process and not the Permit renewal process.

Comment 5: In section II.19, there should be no waste application in wind conditions "reasonably expected to cause mist to reach surface waters, wetlands, or cross property or field boundaries". This seems to us to be a pretty unenforceable provision, and we think this needs to be more specifically implemented in order to make a more credible permit and actually require documentation of conditions under which applications occur.

Response: Condition II.19: NC NRCS Conservation Practice Standard No. 590 – Nutrient Management, the state technical standard for animal waste application, directs operators to not apply wastes when there is a high probability that the wind will blow the material offsite. A more thorough analysis would be needed before more specific performance criteria could be implemented.

Comment 6: Section III.5 calls for an analysis of representative sample of waste that to be applied within 60 days before or after the application. If you are recalibrating for not only the field you are applying to and its conditions but also for the constituents in the waste to be applied, it seems very strange to allow this analysis to be done 60 days after the application occurs.

Response: Condition III.5: The Permit condition states "as close to the time of application as practical and at least within sixty (60) days..." The time requirement for waste analysis is specified in G.S. 143-215.10C(e)(6) and cannot be changed by this process.

Comment 7: Section III.9 says that any discharge to surface waters or wetlands requires sampling of the waste 72 hours, up to 72 hours after the discharge is first observed and a monitoring report to the Division within 30 days. But, more appropriately it requires 24 hour notice to the regional office that this discharge has occurred. Why would you only require sampling up to 72 hours after a discharge event?

Response: The Permits require notification of the Division within 24 hours of first knowledge of a discharge. The waste sample taken by the permittee within 72 hours is required to characterize the source of the release. The Division may sample as appropriate to determine the nature of a release and the extent of the impact on the land and receiving water bodies.

Comment 8: Then in Section V.12, I know that there was some legislation this year referring to changing compliance boundaries in some cases. I am hoping that the citation to the rule in the Permit means that this one of the cases where the compliance boundaries have not been shifted to the property boundary. It would seem particularly inappropriate on a large farm where you are only dealing with a lagoon or sprayfield operation that's likely to be a part of that farm. In any case, without any monitoring requirements, how is compliance to be assured that there are no violations up to the compliance boundary?

Response: Section 46 of Session Law 2013-413 amended G.S. 143-215.1(i) to include Compliance Boundary language that is specific to individual permits, and therefore not applicable to facilities covered under the proposed general permits. In addition, the statute is clear that nothing in the subsection shall be interpreted to require a revision to an existing compliance boundary previously approved by rule or permit. Groundwater monitoring is not required for these permitted facilities unless there is evidence of offsite groundwater impacts.

Comment 9: We have a lot encroachment from residential. That encroachment takes property from us every time they drill a well or build a house. The current permit says we are required to stay back 100 foot from any well. However, the county allows you to drill a well within 10 foot of property line. That means we lose 90 feet. Under our waste management plan, it says we are to stay 200 foot from a residence which falls under this permit guidance we have to follow animal waste permit/cattle waste management plan. That plan says 200 foot so we must maintain that distance. So we lose 190 feet when they build a house 10 foot from the property line, and we get no compensation for that property we lose.

Response: 15A NCAC 02C .0107(a)(2) Standards of Construction: Water Supply Wells requires a minimum horizontal separation between a well and the following potential sources of groundwater contamination at the time of well construction: 100 feet for

industrial or municipal residuals disposal or wastewater-irrigation sites; and 100 feet for animal feedlots or manure piles. New water supply well construction must consider existing potential sources before well construction is allowed.

Setback requirements for animal waste application fields are established at the time the field is put into use. New homes being constructed adjacent to established, documented waste application fields would not require modifications to existing buffers for those fields.

V. THE WRITTEN COMMENTS

The comment period for these draft general permits remained open until December 6, 2013. During this period, a total of six written comments regarding the proposed permits were received. A summary of the written comments are provided in this document along with the corresponding responses to each comment. Division Staff prepared responses for each comment and used feedback from the Hearing Officers to ensure that permit relevant public concerns were addressed. All the written comments that were received are contained in Attachment 6.

Comment 10: Norman Jordan, on behalf of the North Carolina Dairy Producers Association, expressed concern that there are no additional changes made that would make it more difficult or expensive for dairy farmers to comply with the permits.

Response: This issue was addressed in the response to Oral Comment 2.

Comment 11: Anne Coan, on behalf of the North Carolina Farm Bureau Federation, submitted the following comments:

1. NC Farm Bureau opposes any additional changes to the permits that would make the permits more stringent or that would make compliance with the permits more costly or burdensome to the farmers.
2. It is important that cattle and dairy farmers understand that once a permit it rescinded they would not be allowed to go above the permitting threshold of 100 confined cattle without installing facility upgrades.

Response:

1. *Additional Modification: This issue is addressed in the response to Oral Comment 2.*
2. *Rescission notification: This issue is addressed in the response to Oral Comment 3.*

Comment 12: Keith Larick, on behalf of the North Carolina Department of Agriculture and Consumer Services, would oppose any additional changes to the permits that would increase the regulatory requirements.

Response: This issue was addressed in the response to Oral Comment 2.

Comment 13: Jocelyn D'Ambrosia of Earthjustice, Gray Jernigan of Waterkeeper Alliance, and Chandra Taylor of Southern Environmental Law Center, on behalf of the Catawba Riverkeeper Foundation, Cape Fear River Watch, Neuse Riverkeeper Foundation, North Carolina Environmental Justice Network, Pamlico-Tar River Foundation, Waterkeepers Carolina, Western North Carolina Alliance, Winyah Rivers Foundation, and Yadkin Riverkeeper, Inc., submitted the following comments:

1. The general permits do not meet the non-discharge requirements; facilities under the permits are discharging significant nutrient and bacteria loads to watersheds across North Carolina. DENR must use the renewal period as an opportunity to assess whether facilities are complying with the permits and come up with alternative measures to control pollution from these facilities.

Response: General Permits are for non-discharge animal waste management systems in accordance with G.S. §143-215. Condition I.1 requires systems covered by these General Permits be effectively maintained and operated as non-discharge systems. The Division conducts inspections of all permitted animal operations annually to determine if the system is in compliance with its animal waste management plan and Permit as required by G.S. §143-215.10F. The Division may also conduct sampling as needed to determine if there are any violations of water quality standards, per Condition IV.1.d.

In response to the 2008 Petition for Rule-Making regarding monitoring at animal operations, the Division initiated a monitoring study conducted by the United States Geological Survey (USGS). The USGS collected samples in fifty-four watersheds to identify detectible contributions of pollutants from animal operations. The full report on the study including analysis and results is expected to be finalized and release later in 2014.

2. General permits should be modified to come into compliance with Title VI of the Civil Rights Act of 1964 in addressing the following.
    a. Swine facilities are disproportionately concentrated in communities of color. African American communities disproportionately bear the impact of swine facilities.
    b. Lagoon sprayfield systems can pollute nearby waters through lagoon breaches and spills, lagoon leakage into shallow groundwater, sprayfield runoff from over-applied waste or waste applied on saturated or frozen ground, waste directly applied into ditches, and waste blown into surface waters or neighboring homes during waste application.
    c. Air pollution from swine facilities adversely affects neighboring communities and can spread antibiotic-resistant bacteria, threatening human health. DENR should consider requiring facilities to install controls on confinement houses that filter the air.
    d. Proximity to swine facilities depresses property values.

Response:
2.a. – The General Permits cover existing swine facilities and existing operations that were previously permitted by the Division and are not portable; therefore, the renewal of

these General Permits does not cause additional impacts to communities. Since 1995, all new swine operations have been subject to the Swine Farm Siting Act (G.S. §106-800) which establishes limitations on the siting of swine houses for permitted swine operations. In 2007, G.S. §143-215.10I made permanent the moratorium on the construction of new swine operations or the expansion of existing swine operations that employ a lagoon-sprayfield system as the primary method of waste treatment and disposal. Any new or expanding facilities permitted after that time must satisfy the Performance Standards for New/Expanding Swine Operation (G.S. §143-215.10I and 15A NCAC 02T .1307-1309 and 15A NCAC 02D .1808).

2.b. – There are statutes, rules, and permit conditions that address each of the concerns that were raised. Examples include the following:

- *Lagoon breaches and spills are prohibited under the General Permits. Permit Conditions I.1, II.1, II11-15, II.25, II.27, III.1-3, III.18, IV.1, and V.2 all directly address issues to prevent lagoon breaches and spills.*
- *Permitted lagoons are required to meet the current NC NRCS Conservation Practice Standard No. 359 – Waste Treatment Lagoon at the time of construction. Earthen structures for new/expanding swine operations must be designed and constructed with synthetic liners to eliminate seepage, 15A NCAC 02T .1307(1)(A).*
- *Permit Condition II.5 prohibits waste application at rates resulting in excessive ponding or any runoff.*
- *Condition II.21 prohibits the application of waste on saturated or frozen ground.*
- *The General Permits do not allow for discharges to ditches. Condition II.1 prohibits waste being directly applied to ditches.*
- *Condition II.19 prohibits waste from being applied such that it reaches surface waters or wetlands or crosses property lines or field boundaries.*

The Division conducts inspections of all permitted animal operations annually to determine if the system is in compliance with its animal waste management plan and Permit as required by G.S. §143-215.10F. The Division may also conduct sampling to determine if there are any violations of water quality standards.

2.c. – Permittees are required by G.S. §143-215.10C(e)(1) to develop and follow and Odor Control Checklist to reduce off-site odor impacts as a part of the CAWMP. Odor complaints related to animal operations are forwarded to and assessed by the Division of Air Quality. Site specific measures may be required based upon the findings of the Division of Air Quality. Some swine operations are voluntarily making modifications that improve air quality such as installing lagoon covers for methane capture and energy generation.

2.d. – The General Permits cover existing swine facilities. Since 1995, all new swine operations have been subject to the Swine Farm Siting Act (G.S. §106-800) which establishes limitations on the siting of swine houses for permitted swine operations including setbacks to occupied residences, schools, hospitals, churches, outdoor recreational facilities, national parks, State Parks, historic properties acquired by the state, child care centers, property boundaries, and wells.

3. Condition I.1 – This condition does not protect against discharges. The 25-year/24-hour storm design standard is not as protective against discharge as it may have been in the past. The last paragraph of this condition appears to allow waste discharges to or from ditches. DENR should prohibit any discharge of waste from or application of waste to a ditch that drains to surface waters or wetlands.

Response: G.S. §143-215.10C(b) states that animal waste management systems shall be designed, constructed, and operated so that the system does not cause pollution in waters of the State except as may result due to a storm event more severe than the 25-year, 24-hour storm. The structures were required to be designed based upon the NRCS Standard in place at the time of construction. There is no requirement to modify structure design.

The Condition does not allow for the discharge or application of waste to ditches and further prohibits the discharge to surface waters or wetlands. The exception described in the last paragraph requires that discharges from the ditch be controlled by approved best management practices (BMPs); this refers to the hydrologic flow leaving the ditch, not a release of pollutants. However, should any waste reach the ditch, it is required to be removed immediately, and must be reported as a discharge to a ditch.

4. Condition I.3 – DENR should require assessments of the effectiveness of the Certified Animal Waste Management Plan (CAWMP) to be submitted quarterly or with the annual certification. These assessments should be made public. DENR should require permittees to submit all amendments to the CAWMP to the Division for approval.

Response: The records associated with assessment of the CAWMP's effectiveness are maintained as part of the facility's records and are reviewed by the Division during annual compliance inspections. These records include but are not limited to lagoon level records, irrigation records, rainfall records, soil sample analysis, waste analysis, and crop yield records. Records are maintained by the Permittee for a minimum of three years, per Condition III.11, and must be submitted to the Division upon request.

5. Condition I.5 – The Division should require all facilities in all watersheds to submit facility wide evaluations for phosphorous loss at least every three years. General permits should prohibit all facilities from applying waste on fields at rates that exceed the established crop removal rate for phosphorous, not just those with "HIGH" phosphorous-loss assessment rating.

Response: 15A NCAC 02T. 1304 specifically exempts State Permitted facilities from phosphorus requirements. However, facilities in watersheds that are sensitive to nutrient enrichment can be required to conduct phosphorus evaluations through 15A NCAC 02B.

G.S. §143-215.10C(e)(6) establishes that nitrogen shall be a rate limiting element and that phosphorous application comply with the nutrient management standard. NC manure nutrient application criteria as related to phosphorous-loss assessments are established by NC NRCS Conservation Practice Standard No. 590 – Nutrient Management which is the state technical standard for nutrient management.

6. Condition I.6 – DENR should define the term "treatment units," and clarify that permittees may not circumvent the state law barring the construction, operation, or expansion of an animal waste management system that serves a swine farm that employs an anaerobic lagoon as the primary method of treatment.

Response: The addition of definitions involves rule changes and is not within the scope of this permit renewal process. The addition of treatment units refers to supplemental treatment processes in conjunction with the current treatment system, i.e. a solids separation unit. The Condition specifically requires Division approval for use. Condition I.4 specifically prohibits any expansion without meeting the requirements of the Performance Standards for New/Expanding Swine Operation (G.S. §143-215.10.I).

7. Condition I.7 – The permit should define the term "innovative treatment process" and clarify that permittees may not circumvent the state law barring the construction, operation, or expansion of an animal waste management system that serves a swine farm that employs an anaerobic lagoon as the primary method of treatment.

Response: The addition of definitions involves rule changes and is not within the scope of this permit renewal process.

Condition I.4 specifically prohibits any expansion without meeting the requirements of the Performance Standards for New/Expanding Swine Operation (G.S. §143-215.10.I). The pilot testing of an innovative treatment process does not supersede this requirement.

8. Condition I.8 – The permit should increase the setback for private wells to at least 500 feet, impose setback for public or community wells of at least 1,000 feet, and impose setback to protect waters that have high recreational use as well as designated high quality waters.

Response: This issue is addressed in the response to Oral Comment 4.

9. Condition II.7 – This condition should be amended to require manure and sludge to be incorporated into the soil within twelve hours of application to bare soils.

Response: The Division feels that the requirement for sludge applied to bare fields be incorporated before the next rain event, in addition to the current two-day maximum is appropriate. The two-day maximum is consistent with the Ninth Senate Bill 1217 Interagency Group Guidance Document, Sept. 2009.

10. Condition II.10 – DENR should ensure that the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) Veterinary Division's statutes and regulations protect the environment and promulgate additional regulations if needed. The permit should define "normal mortality rates" for each facility and require reporting of all die-offs in excess of those rates within 24 hours. Permittees should consult with the Division about appropriate burial locations

along with the dates and number of animals buried by species and type. The Division should also require groundwater monitoring for each burial site.

Response: It is outside of the purview of the Division to revise or promulgate new regulations that are under the authority of the NCDA&CS Veterinary Division granted by General Statutes Chapter 106, Article 34.

G.S. §143-215.10C(e)(3) requires Permittees to develop a mortality management plan as a part of their CAWMP. Permittees are further required to maintain stocking (and mortality) records. Division Staff does not recommend a 24-hour reporting requirement.

This Condition does require that burial be done in consultation NCDA&CS Veterinary Division, that the location be mapped, and that map provided to the Division along with records of dates and numbers of animals buried by species and type. The Condition also provides for groundwater monitoring as determined by the Division.

11. Condition II.12 – Permit should specify that the protective vegetative cover must be designed to prevent the berms and embankments from eroding.

Response: The purpose of a protective cover is the prevention of erosion. The maintenance of this protective cover and the condition of embankments, berms, pipe runs, and diversions are a part of the annual inspection that the Division conducts as required by G.S. §143-215.10F. Staff does not recommend any changes to the Permit language.

12. Condition II.17 – The permit should not incorporate an open-ended affirmative defense to potentially dangerous discharges. The permit should define circumstances that are considered "beyond the Permittee's control" to not include preventable accidents or operator error.

Response: The Division feels that the affirmative defense provision is appropriate. There are very few situations where an operator would be unable to perform the 120-minute inspection, and claim this provision. The Division does have the authority to refute the affirmative defense assertion if necessary.

13. Condition II.22 – This condition should be strengthened to require land application cease at least twenty-four hours before National Weather Service predicts, with 80% certainty, that there will be two inches or more of rainfall in the county in which the facility is located. Permit should also prohibit land application for at least twenty-four hours after rainfall of two inches or more. Recommends a twenty-four hour cessation period prior to a tropical storm or hurricane; the current four hour cessation period does not give waste time to incorporate into soil.

Response: The Condition requires Permittee to consider pending weather conditions when making decisions regarding land application of waste and to record the weather conditions. Forecasts of rainfall of two inches or more as well as the timing would need

to be considered. The Division does not recommend language changes regarding cessation of waste application prior to storm events.

In actual practice, field conditions in the twenty-four hours following a two inch rainfall event typically prohibit the application of waste; the ground is often too wet for equipment to cross the field. Additionally, Condition II.21 prohibits application of waste on flooded or saturated land, and Condition II.5 prohibits application that results in excessive ponding or runoff. Based upon these permit conditions, the Division does not recommend any language changes regarding a twenty-four hour prohibition of application of waste following a rainfall of two inches or more.

The Condition requires application of waste cease within four hours of the National Weather Service (NWS) issuance of Hurricane/Tropical Storm Warnings or Flood Watch associated with a Hurricane/Tropical Storm. The NWS issues these watches and warnings twenty-four hours prior to the storm event. The four hour window after issuance of said watches/warnings provides operators time to receive notification and cease waste application. This also allows at least twenty hours for the waste to incorporate into the soil.

14. Condition II.24 – Calibration should be required at least once every six months and results of testing submitted to Division.

Response: The Division feels that the current calibration frequency is appropriate. This issue is further addressed in the response to Oral Comment 1.

15. Condition II.26 – Permit should prohibit the storage of crops in bales around the exterior of sprayfields/crop fields.

Response: The storage of hay bales on field edges is a common agricultural practice not exclusive to waste application fields. The inspection process also addresses any situation when bales are not being utilized or removed. Division Staff does not recommend any language change.

16. Condition II.27 – Permit should require the Division approval prior to lowering lagoon levels below designed stop pump levels and should clarify that this does not override Condition II.22.

Response: Division notification is not necessary. Provisions for temporary lowering of lagoon levels below stop pump levels are in the NC NRCS Conservation Practice Standard No. 359 – Waste Treatment Lagoon, the state technical standard.

17. Condition III.1 – DENR should provide Permittees guidance on how to inspect lagoons, require broader installation and use of monitoring wells or an evaporation pan to determine lagoon seepage loss, or require third party testing for lagoon seepage.

Response: Permittees are required to do a visual inspection to look for signs of erosion, leakage, damage or discharges as a part of their monthly inspection. Division staff also inspects the embankments during the annual inspection process. The inspector informs the Permittee of any areas of concern and recommends corrective actions. Technical assistance from NRCS or private consultants is available to advise Permittees on addressing such issues.

Monitoring wells may be required as determined by the Division, per Condition III.10. Division Staff does not recommend any changes to the Permit language.

18. Condition III.5 – Waste sample analysis should be required prior to application, not 60 days before or after application.

Response: This issue is addressed in the response to Oral Comment 6.

19. Condition III.9(f) – Sampling of source lagoon/storage pond should be required within twelve hours. Sampling of water receiving the discharge should also be sampled for the parameters listed within twelve hours. Sample handling practices should be specified, and samples taken to a certified laboratory. Monitoring results should be submitted within fifteen days and made public, rather than within thirty days.

Response: This issue is addressed in the response to Oral Comment 7.

Thirty days is appropriate to obtain and submit sampling data. All reports received by the Division are public record.

20. Condition III.11 – Records retention should be for five years not three years. Once every five years DENR should conduct a full compliance inspection of the facility and records.

Response: The Division conducts a full compliance inspection annually for each facility covered under these General Permits as required by G.S. §143-215.10F. All records within the required retention schedule must be made available during the inspection or submitted upon request, per Condition III.12. Division staff does not recommend any changes to the current retention schedule.

21. Condition III.14 – All permittees should be required to file an annual compliance report regardless of compliance history.

Response: The Division conducts inspections of all permitted animal operations annually as required by G.S. §143-215.10F. All records required by this Permit are reviewed by the Division during the inspection. Condition III.12 further requires the Permittee to submit any records or reports within fifteen days of request by the Division. This Condition reserves the right for the Division to require an annual report.

22. Condition III.15 to III.17 – Terminology should be consistent across these three conditions and tie to the discharge of waste. Press release requirement in Condition III.15 should be within twenty-four hours and specify contents of the press release. Condition III.17 should be made clear that discharges of 1,000,000 gallons or more require press release and public notice be expanded to included appropriate counties recommended by the Division. Permittees should be required to contact the Division within twelve hours of a discharge of 5,000 gallons or more. Permittees should be required to maintain a copy of the press release and public notice for up to one year and to provide the Division with a copy of the notice and proof of publication.

Response: The Division agrees that the terminology should be consistent across the three Conditions. It is recommended that all three Conditions use the term "animal waste"; this is also consistent with G.S. §143-215.10C(h).

The requirement to issue a press release within forty-eight hours of a discharge of 1,000 gallons or more of animal waste to surface waters of the State is a requirement of G.S. §143-215.10C(h)(1) and cannot be changed by this process.

The requirement to publish a notice of the discharge of 15,000 gallons or more of animal waste to surface waters of the State is a requirement of G.S. §143-215.10C(h)(2) and cannot be changed by this process. The publication of a public notice is in addition to the above press release requirement.

It is recommended to add the following two sentences from G.S. §143-215.10C(h)(2) be added to Condition III.16 – "The notice shall be captioned "NOTICE OF DISCHARGE OF ANIMAL WASTE" and "The owner or operator shall file a copy of the notice and proof of publication with the Department within thirty (30) days after the notice is published. Publication of a notice of discharge under this Condition is in addition to the requirement to issue a press release under Condition III.15".

It is recommended to correct the last sentence in Condition III.17 to say "A copy of all public notices and proof of publication must be sent to the Division within thirty (30) days of the after the notice is published."

23. Condition III.18 – Two years is too long for a facility to comply with sludge removal. Compliance should be within one year, rather than two. Facilities that are not able to manage its waste should not be allowed to generate more.

Response: The Division feels that the compliance schedule is appropriate as written. Permittees must identify additional application fields and comply with the application windows for various crops. The Condition does require a Plan of Action be developed within ninety days of determination of the need or sludge removal.

24. Condition IV.1 – Permit should state that facilities are subject to random, unannounced inspections.

Response: The Condition does not preclude random, unannounced inspections. The Division feels that the current wording is appropriate.

25. Condition V.13 – Permit should provide requirements for how systems are to be closed. Depopulated facilities should be required to maintain a permit and inspect the lagoon to ensure it is not leaking. Reopening facilities should have to demonstrate compliance with performance standards in G.S. 143-215.10I. Facilities depopulated due to forced closure or enforcement should develop a plan that rectifies past violations.

Response: Abandoned facilities are held to the conditions of this Permit until lagoon closure. As for the issue of reactivation of abandoned farms, that is addressed by 115A NCAC 02T.1302. Lagoon closure is addressed in Condition V.3, 15A NCAC 02T.1306, and NC NRCS Conservation Practice Standard No. 360 "Closure of Waste Impoundment."

26. Information Collection – Permits should be revised to require all information collected be submitted to DENR quarterly and made readily accessible to the public via a database.

Response: The Division conducts inspections of all permitted animal operations annually as required by G.S. §143-215.10F. All records required by this Permit must be submitted to the Division during the inspection for review. Condition III.12 further requires the Permittee to submit any records or reports within fifteen days of request by the Division. This Condition reserves the right for the Division to require an annual report.

27. DENR should require dry litter poultry facilities to operate under a permitting program. DENR should repeal the permitting by regulation rules applicable to dry litter poultry facilities. At a minimum, facilities that violate the regulations for deemed permitted status to obtain coverage under an individual or general permit.

Response: The General Permits presented for public review and comment are renewals of existing general permits. The introduction of a new general permit for a permitted activity should be addressed in a separate action. At this time, the Division has not received any requests for permit coverage from a dry litter poultry operation. If such a request is received, an individual permit can be issued in compliance with all applicable statutes and regulations. A general permit could be developed if multiple dry litter poultry facilities seek coverage.

Comment 14: Steve Wing, Ginger T. Guidry, Sarah Hatcher, and Jessica Rinsky of the UNC-CH School of Public Health submitted the following comments:

1. Negative health impacts of industrial swine operations result from the use of lagoons and sprayfields to manage animal waste. Heath impacts are related to air pollution from barns, lagoons, and sprayfields.

Response: This issue was addressed the response to Comment 13.2.c.

2. Non-therapeutic use of antibiotics in swine production results in negative health impacts.

Response: The Division does not possess the authority to regulate the use of antibiotics in swine production. The General Permits are for non-discharge animal waste management systems in accordance with G.S. §143-215 for the protections of human health and the environment. More research and data is needed regarding emerging contaminants such as pharmaceuticals before limitations could be placed on these parameters. Establishment of such limits would be done through the legislative or rule-making process.

3. The location of confinements and animal waste in flood plains results in negative health impacts.

Response: The Swine Farm Siting Act, G.S. §106-803(a2), prohibits any component of the animal waste management system other than a land application site from being located in the 100 year flood plain. The NCDA&CS Division of Soil & Water Conservation operate a swine farm buyout program from 2000 to 2014. This program

4. The disproportionate burden of animal feeding operations impacts on communities particularly susceptible due to other environmental exposures and inadequate access to medical services.

Response: This issue was addressed the response to Comment 13.2.a.

5. DENR should compile electronic records of information that permittees are required to collect and make them publicly available.

Response: This issue was addressed the response to Comment 13.26.

VI. REVISED STATE GENERAL PERMITS

As a result of the public comments received and further information gathered by the Division during the course of the public comment period, the Division produced revised State General Permits that incorporate the Hearing Officers' recommendations previously discussed in this report. The revised permits are provided as Attachment 7.

VII. RECOMMENDATION

Based upon the information contained in this report, consideration of the comments received, a thorough review of all the information and facts that are pertinent to the development of these permits, and an analysis of the revised permits, the Hearing Officers make the following recommendation:

- The Director should adopt the revised permits contained in Attachment 7. These permits should be issued with an effective date of October 1, 2014.
- Prior to the next renewal period, the Division should re-examine the 2002 protocol for groundwater monitoring around CAFOs to determine whether the 2002 protocol provides adequate protection of human health and the water resources of the state.
- Prior to the next renewal period, the Division should evaluate whether Tropical Storms and Hurricanes are the only extreme rainfall event that should be specifically addressed by the general permit.
- As a part of the rule review process required by Session Law 2013-413, the Division should consider whether rule changes are necessary to address those comments that the Division felt were more appropriate to address through a rulemaking process.