



Virginia
Regulatory
Town Hall

Exempt Action Final Regulation Agency Background Document

Agency Name:	State Water Control Board
VAC Chapter Number:	9 VAC 25-630-10 et seq.
Regulation Title:	Virginia Pollution Abatement (VPA) General Permit Regulation for Poultry Waste Management
Action Title:	Final Adoption
Date:	September 19, 2000

Where an agency or regulation is exempt in part or in whole from the requirements of the Administrative Process Act (§ 9-6.14:1 *et seq.* of the *Code of Virginia*) (APA), the agency may provide information pertaining to the action to be included on the Regulatory Town Hall. The agency must still comply the requirements of the Virginia Register Act (§ 9-6.18 *et seq.* of the *Code of Virginia*) and file with the Registrar and publish their regulations in a style and format conforming with the *Virginia Register Form, Style and Procedure Manual*. The agency must also comply with Executive Order Fifty-Eight (99) which requires an assessment of the regulation's impact on the institution of the family and family stability.

This agency background document may be used for actions exempt pursuant to § 9-6.14:4.1(C) at the final stage. Note that agency actions exempt pursuant to § 9-6.14:4.1(C) of the APA do not require filing with the Registrar at the proposed stage.

In addition, agency actions exempt pursuant to § 9-6.14:4.1(B) of the APA are not subject to the requirements of the Virginia Register Act (§ 9-6.18 *et seq.* of the *Code of Virginia*) and therefore are not subject to publication. Please refer to the *Virginia Register Form, Style and Procedure Manual* for more information.

Summary

Please provide a brief summary of the proposed new regulation, amendments to an existing regulation, or the regulation being repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation, instead give a summary of the regulatory action and alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The 1999 General Assembly enacted Section 62.1-44.17:1.1 in the State Water Control Law requiring a poultry waste management program for confined poultry feeding operations. The State Water Control Board has adopted a general permit regulation that authorizes

management of poultry waste at these operations.. The general permit establishes standards and criteria for the storage, management and tracking of poultry waste and sets minimum monitoring requirements. The general permit requires all regulated pollutant management activities to maintain no point source discharge of pollution to state waters except in the case of a storm event greater than the 25-year, 24-hour storm. The permittee will be required to develop a nutrient management plan approved by the Department of Conservation and Recreation.

In response to comments received from the public, substantive changes were made to the regulation since it was last published in the Virginia Register. A definition of "poultry waste broker" was added along with tracking, accounting and reporting requirements for brokers. The requirement for nitrate testing of soils once in three years was deleted. New poultry waste storage facilities will only be allowed in the 100-year floodplain if the poultry grower has no land outside the floodplain on which to construct the facility. New, expanded or replacement poultry growing houses will only be allowed in the 100-year floodplain if they are part of an ongoing growing operation. Any new waste storage facilities and growing houses built in the 100-year floodplain have to be constructed above the flood elevation or otherwise protected from inundation by flood waters. The record keeping requirements for growers who transfer waste to other persons were revised to include information on the location where the waste is to be utilized. The provision regarding the timing of land application of poultry waste was revised to clarify the primacy of the farm's nutrient management plan (NMP) in determining when waste can be applied. This provision now applies to periods of inclement weather which occur within the NMP-allowed land application schedule. The provision for operator training was revised to require attendance at one training session within one year of applying for general permit coverage.

The State Water Control Board, through the Department of Environmental Quality, will annually compile information received from poultry growers and poultry waste brokers regarding the amount of poultry waste transferred in Virginia, the nutrient content of the waste

and the geographic distribution of the transferred waste. This compilation will be made available to the public.

Section 62.1-44.17:1.1 H requires each commercial poultry processor in Virginia to implement a plan under which the processor, either directly or under contract with a third party, shall:

1. Provide technical assistance to the poultry growers with whom it contracts on the proper management and storage of poultry waste in accordance with best management practices;
2. Provide education programs on poultry waste nutrient management for the poultry growers with whom it contracts as well as for poultry litter brokers and persons utilizing poultry waste;
3. Provide a toll-free hotline and advertising program to assist poultry growers with excess amounts of poultry waste to make available such waste to persons in other areas who can use such waste as a fertilizer or for other alternative purposes;
4. Participate in the development of a poultry waste transportation and alternative use equal matching grant program between the Commonwealth and commercial poultry processors to (i) facilitate the transportation of excess poultry waste in the possession of poultry growers with whom it contracts to persons in other areas who can use such waste as a fertilizer or for other alternative purposes and (ii) encourage alternative uses to land application of poultry waste;
5. Conduct research on the reduction of phosphorus in poultry waste, innovative best management practices for poultry waste, water quality issues concerning poultry waste, or alternative uses of poultry waste; and
6. Conduct research on and consider implementation of nutrient reduction strategies in the formulation of feed. Such nutrient reduction strategies may include the addition of phytase or other feed additives or modifications to reduce nutrients in poultry waste.

The poultry processors are to make annual reports to the State Water Control Board on the activities undertaken pursuant to these plans. On or before December 31, 2003, the Director of the Department of Environmental Quality, in consultation with the Director of the Department of Conservation and Recreation and the Commissioner of Agriculture and Consumer Services,

will report to the Governor and the General Assembly on the effectiveness of these processor plans

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency .including the date the action was taken, the name of the agency taking the action, and the title of the regulation.

On September 19, 2000 the State Water Control Board voted unanimously to adopt 9 VAC 25-630-10 et seq., Virginia Pollution Abatement (VPA) General Permit Regulation for Poultry Waste Management.

Additional Information

Please indicate that the text of the proposed regulation, the reporting forms the agency intends to incorporate or use in administering the proposed regulation, a copy of any documents to be incorporated by reference are attached.

Please state that the Office of the Attorney General (OAG) has certified that the agency has the statutory authority to promulgate the proposed regulation and that it comports with applicable state and/or federal law. Note that the OAG's certification is not required for Marine Resources Commission regulations.

If the exemption claimed falls under § 9-6.14:4.1(C) (4)(c) of the APA please include the federal law or regulations being relied upon for the final agency action.

The text of the final regulation, the Registration statement for requesting coverage under the general permit and copies of all documents incorporated by reference are attached. The Attorney General's Office has certified that the Board has the statutory authority to promulgate this regulation. The final regulation comports with applicable state and/or federal law.

Family Impact Statement

Please provide an analysis of the regulatory action that assesses the impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This regulation will have no direct impact on the institution of the family or family stability.

SUPPLEMENTAL INFORMATION: Summary of Comments and Responses for the VPA General Permit Regulation for Poultry Waste Management, 9 VAC 25-630-10 et seq.

The public comment period for this draft regulation ran from April 24, 2000 through June 23, 2000. Public hearings were held in Melfa on May 30; in Bridgewater on June 1, in Richmond on June 5 and in Hampton on June 8, 2000. Mr. Futrell was the hearing officer at Melfa, Mr. Craig was the hearing officer in Bridgewater and Mr. Van Auken chaired the hearings in Richmond and Hampton. A total of 289 people attended the hearings; some attended more than one. A total of 110 people spoke during the four hearings; some spoke at more than one hearing. Written comments were received from 163 persons, many of whom were also speakers or attended the public hearings. In addition, staff received 1,781 copies of a form letter developed by the Chesapeake Bay Foundation. All of these written comments and the audio tapes of the public hearings will be kept in the public record for this rulemaking. Several written comments arrived after the close of the comment period. While these have not been included in the public record, they were read. They did not identify issues that had not already been addressed by timely comments.

Comment 1: Litter storage. All poultry litter piles should be covered immediately upon removal from the growing house. Farmers should not be allowed to leave litter uncovered for 14 days because the greatest risk of pollution occurs when it rains within the first several days. Not covering the piles of litter for 14 days threatens to pollute both ground water and surface water. Poultry litter piles should at least be covered to prevent exposure to precipitation. It may be necessary for the farmer to keep records on the timing of storage so he can prove the piles have only been uncovered for 14 days.

Litter piles should be subject to the same buffer requirements as land application sites.

Growers should be allowed to temporarily store litter for more than 14 days before they have to provide a permanent storage structure. Temporary storage should be allowed for up to 90 days or until the next crop rotation. Temporary storage should not be restricted as long as the litter piles are covered. As drafted, the proposed regulation would force a grower to relocate any unused litter at temporary staging sites to a permanent storage facility after 14 days. Fourteen days unreasonably burdens growers by forcing them to spend time and resources moving litter when there is a less burdensome alternative. We strongly encourage some clarification that the temporary storage may be extended by covering the litter. Transportation of litter from the Valley to the Piedmont may take several trips over a number of days or weeks. It is unreasonable to expect the farmer to cover a pile and then have to uncover it in order to add more litter, then have to cover it again. Outdoor storage of litter should be allowed for at least 45 days prior to covering.

If the poultry grower plans to transfer all of his litter off the farm, he shouldn't have to provide a storage facility.

The cost of a litter storage facility is too high and gusty winds will make a simple tarp out of the question. Litter storage sheds cannot provide protection from precipitation and wind because they are not completely enclosed. Covering a litter pile with a tarp is more than a 10 to 15 minute job. Perhaps separate requirements for temporary versus permanent storage are needed.

Properly shaped litter piles do not need to be covered. When dry litter is first exposed to rainfall, it acts like a sponge and absorbs water, thereby minimizing the potential for runoff or leaching. The litter forms a crust after the first rain and subsequent rainfall will flow off the sides of the pile without carrying nutrients with it. There is no scientific data to show that nutrients are present in large quantities in the runoff from an uncovered pile of poultry litter. Additionally, the crust will prevent leaching of nutrients from under the pile. Siting of the litter pile and the complete removal of the stockpile residue may be more important for protecting water quality than covering the pile

Storage piles for composting poultry waste that have berms around them or with other means of collecting storm water should not have to be covered. Covering will prevent oxygen from being available for composting of the stored litter. This is especially true if there were a large die-off and the dead birds were composted. The composting would take up to 6 weeks and it needs to be done with adequate oxygen available to the pile. That means it can't be covered with tarps. The regulation should include provisions for large scale composting operations that provide BMPs to minimize runoff and leaching such as berms and storm water diversion or collection that prevent discharges to state waters.

Litter storage requirements should not be more stringent than the NRCS specifications required for Ag BMP cost share funding.

The minimum 3 foot separation between waste storage and water table may be very restrictive on the Eastern Shore due to the nature of soils there. The separation distance from the high water table could be reduced from 3 feet to 2 feet and still prevent capillary action from transporting pollutants into ground water. Sites with one to two feet of separation could be allowed to bring in fill material to increase the separation distance to 2 feet provided no more than one foot of fill is used and provided the fill is of sufficient strength and thickness to support farm equipment.

Response: The regulation requires that at any time waste is outside the growing house it must be protected from contact with surface or ground water and the litter must be stored

according to the nutrient management plan. The 14 day grace period provides time for the grower to remove the litter from the growing house and get it spread while also attending to the other activities associated with the farm. Short-term storage of litter without a cover poses minimal pollution potential.

The regulation makes no distinction between temporary and permanent storage facilities. If poultry litter is to be stored for more than 14 days outside the growing house, the pile must be in a facility that provides adequate storage, as defined by the regulation. The choice of method to accomplish this performance standard is left up to the permittee. There are many options available to the grower to meet this requirement. Assistance in deciding the most appropriate option for a particular farm is available from local extension agents, NRCS and Soil and Water Conservation District personnel. Once the pile is properly sited and covered, it can remain indefinitely as long as it continues to meet the adequate storage performance standard of the permit.

Studies provided by one commenter were inconclusive about the benefits of covering litter piles and the advantages of one storage structure over another. They did seem to agree that litter should be stored on impermeable surfaces in order to reduce migration of nitrogen through the soil into ground water. Another important consideration is the complete removal of residues from the soil in storage facilities without permanent covers. The draft general permit attempted to address these concerns by requiring a 3 foot separation distance between the bottom of the litter pile and the seasonal high water table. Other commenters pointed out that a 3 foot separation may not be necessary and recommended reducing it to 2 feet. Based on the comments, the separation distance will be reduced to 2 feet, without a barrier, and a minimum of 1 foot, with a barrier, will be added. The draft also recognized that this separation distance might not be attainable in every location and provided for installation of an impermeable barrier under the pile to protect ground water in the absence of adequate separation. This will be modified to clarify the standards for construction of the impermeable surface. These two changes, when taken together still provide adequate protection from migration of nutrients from the stockpile into ground water. The permit special condition regarding closure of storage facilities will be revised to emphasize the need to remove all residual material from structures without permanent covers and impermeable bottoms.

The requirements of the general permit are not as stringent as the NRCS requirements for cost share funding of animal waste storage structures. NRCS Standards 312 and 313 are more stringent because they contain specific construction requirements. The only design criterion in the general permit is the requirement for an impermeable surface below the stored waste if the high water table is close to the surface.

The composting process does require oxygen and those operations that anticipate composting large volumes of poultry waste should consider construction of a storage facility similar to the NRCS litter shed design so that free exchange of oxygen can occur.

Another option for these operations is to apply for an individual VPA permit that addresses both the composting activity and the poultry growing.

Comment 2: Growing houses in the floodplain. The poultry waste regulation should prohibit construction of new poultry growing houses in the 100 year floodplain or in wetlands. If the regulation prohibits waste storage in the 100 year floodplain, then it should also exclude growing houses since each growing house could contain up to 225 tons of poultry litter. We are experiencing more and more 100-year floods. Water quality will not be protected if the growing houses are situated in areas subject to flooding. Inundation of a growing house would also result in degradation of water quality from poultry mortalities. DEQ's own review of the proposed U.S. Army Corps of Engineers regional [wetland protection] permits requested that no poultry growing houses be permitted in the floodplain. An examination of the 100-year floodplain maps for the Eastern Shore indicates that very little land would be excluded from development for growing houses if this prohibition were enacted.

The existing CAFO general permit does not prohibit location of new swine or cattle growing operations in the 100-year floodplain. It deals with waste management facilities. The poultry regulation should do the same.

Rather than ban waste storage and growing houses from the 100-year floodplain, the alternative should allow for construction but in a manner to protect from flooding (i.e. build up the foundation so that the building itself is above the floodplain). The prohibition could allow construction in the 100-year floodplain if it also required structural protection from flood waters or construction above the flood elevation.

Probably less than 3% of existing houses are built in the 100-year floodplain. Farm Credit and county ordinances will only allow new houses in the floodplain if they're raised above the flood level. Even then, federal law requires the loan applicant to obtain flood insurance. In most cases, the added cost of excavation and insurance will make location in the floodplain prohibitively expensive.

Response: The intent of the floodplain prohibition was to keep litter piles off of stream banks and to minimize the possibility that one might be inundated by high water. While they are not technically waste storage structures, poultry growing houses can contain significant amounts of poultry litter. This is more of a probability with poultry growing than it is with swine or dairy operations where manure is frequently removed to a designated waste storage facility. Therefore, in order to treat growing houses and storage facilities equitably, the poultry general permit regulation will be revised to require that both new poultry waste storage structures and new poultry growing houses be either located outside the 100-year floodplain or, if they are within the 100-year floodplain, they must be constructed above the flood elevation or otherwise protected from inundation or

damage by flood waters. If, as one commenter stated, only about 3% of the growing houses are located within the 100-year floodplain now and those must be elevated above the flood level, this new prohibition should not have a significant impact on the current or future practices for location of growing houses.

Comment 3: Litter tracking. Provide for thorough, complete and detailed tracking of the transfer and final disposition of poultry manure. Whenever there is a transfer of large quantities of manure, the system should track this to the end user, regardless of whether the recipient is a farmer or a manure broker.

Track all waste transfers, regardless of size, from cradle to grave since poultry litter is a potent potential source of solids and nutrient loads to water bodies.

Records must be maintained that track who received the waste, how much was received and when and the nearest stream or waterbody to which the recipient site drains.. The final regulation should require an ongoing accounting by DEQ of how much is being applied and where. The names, addresses or other identifying information on persons who buy or take litter from the farm should be kept confidential by DEQ. DEQ should keep confidential the identities of the sellers and recipients.

These records should be kept for the full 10 year life of the permit, not just 3 years on order to allow tracking of long-term trends. DEQ should make these records available to the public in a user-friendly format that depicts the amounts and locations of litter and nutrients that have been transferred.

Poultry litter brokers should be required to keep records of all transfers of litter and all tracking information should be reported to DEQ. There should be a registration requirement for litter brokers and they should have to keep records of litter transfers for the life of their registration. Brokers should be required to provide the nutrient analysis and fact sheet to end users. DEQ should require brokers to keep a record of the amount of poultry waste transferred, the date of the transfer, nutrient content of the waste, locality in which the recipient will use the waste, nearest waterbody to the use site and a signed certification that the waste will be utilized properly. Brokers already keep logs of the litter seller, the buyer, the trucker, and the weight of the litter transported. These records held by the broker should be available for DEQ inspection so that the end use of the litter can be tracked. A regulatory provision requiring brokers to keep records of their transactions would be acceptable as long as the brokers' proprietary interests were protected. The name of the person receiving the waste from the broker, who signs the certification, should be considered proprietary and kept confidential. Providing the broker's customer list to anyone who asks will set up unfair competition.

If litter is transformed into another product with properties similar to commercial fertilizer, then tracking of the litter should end at the manufacturing point.

The Board must evaluate the issue of waste tracking and accounting in the broad context of fertilizer in general, value of poultry litter, transport of excess litter and long-term goals for improving water quality. The regulation must implement the law's waste tracking and accounting mandate without jeopardizing the law's goal of transporting poultry litter to areas that require the nutrients available in the litter.

Response: HB1207 requires that the Board's regulatory program for poultry waste provide for waste tracking and accounting. The primary issue is the extent to which waste must be tracked. The last comment above summarizes the Board's dilemma in this regard. It has been difficult to find a balance between a program that mandates tracking and accounting and one that establishes a disincentive for use of the material.

The names and addresses of poultry waste users cannot be kept confidential after they are in DEQ's possession. This applies to those who receive waste from the poultry grower and to those who receive it from litter brokers. After DEQ is in possession of the litter tracking information kept by the poultry grower or poultry waste user, it becomes available to the public under the Virginia Freedom of Information Act. Section 62.1-44.21 of the State Water Control Law provides for withholding information only when it constitutes a secret formula, a secret process or a secret method. Records of poultry waste transactions do not qualify for an exemption under these statutes.

The language on record keeping for poultry growers who transfer waste to others will be revised to expand the information requirements to include the locality where the use will occur and the name of the stream or waterbody nearest the use site. DEQ can track the movement of litter with this information without having to know the name and address of the recipient.

The three year record retention period is consistent with the requirements for maintaining records in individual VPA and VPDES permits. There is a five year mandatory retention period established in the CAFO general permit statute at § 62.1-44.17:1 E 4. However, since the law at § 62.1-44.15(5a) mandates annual inspections for facilities covered by VPA general permits, the Department will have adequate opportunities to review the information if it is kept for three years and made available to the inspectors, as the general permit requires. Extending the records retention period beyond three years does not provide any added benefit.

The regulation will be revised to add a section specifying waste tracking and accounting requirements for poultry waste brokers. This new section will be applicable to

brokers who possesses more than 10 tons of poultry waste during any 365 day period and who sell or give away some or all of the waste to others. The litter brokers will be required to maintain records of their litter transactions for 3 years and make annual reports to DEQ. The records that will be maintained include the source of the waste, the amount of waste received, and the date the waste was acquired. When the waste is sold or given away to another person, the broker will have to record the same information required of the poultry grower. The broker will also be required to provide the waste user with copies of the latest nutrient analysis for the waste and the litter fact sheet that explains proper waste storage and management.

Comment 4: Regulation of poultry waste used off the farm. **Poultry litter that moves off the farm, but remains in the areas most impacted by animal waste should be land applied only according to a DCR approved nutrient management plan. All those outside of the high risk areas could receive and apply litter without a formal nutrient management plan as long as they receive the nutrient management fact sheet and sign the certification. This should provide an incentive to transport poultry litter away from highly impacted areas to locations where the soils need the nutrients. DEQ would identify the high risk areas based on the 305(b) report listing of watersheds with a high potential for pollution from animal waste loads. The manure users would not be issued permits, but failure to comply with this requirement would be a violation of the regulation. The broker must also obtain a signed agreement from the end user acknowledging receipt of the waste, fact sheet and nutrient analysis and certifying that they will use the waste according to the fact sheet**

Do not regulate end users. This will cause them to switch to commercial fertilizer and reduce the market for litter. Remove the requirement in the regulation that the end user agrees to use the litter according to the recommendations in the fact sheet. If they do have to sign something, it should only say that they acknowledge receipt of the litter, the nutrient analysis and the fact sheet. End users will not waste a material they have to pay for. Education of litter users could accomplish as much for improving water quality as a certification statement and would be less threatening. The industry participants in the HB 1207 negotiations did not agree to any end user regulation, nor did the bill's proponents mention end user regulation during their presentations to the General Assembly.

End users should not be required to maintain use records unless they do it under their own nutrient management plan. If the growers keep records of their litter transfers and provide the nutrient analysis and fact sheet to the end user, that should be sufficient to satisfy the law's requirements. More onerous regulation could cause growers to have to pay to have litter removed from the farm because no one will want to buy it.

Regulatory oversight of end users, unless equitably applied to all types of fertilizer, would drastically reduce the possibility of marketing litter in phosphorus-deficient areas. The State Water Control Law and the Agriculture Stewardship Act already provide the state adequate mechanisms to address any litter recipients that cause water pollution

through mismanagement of litter. The water quality improvement value of strong tracking requirements, end user certifications and detailed off-farm application instructions or requirements is nil. These types of requirements are just "paper conservation" and have negative impacts on the intent of the poultry waste management program. How can Virginia develop a program to facilitate transportation of excess litter on one hand while establishing requirements that discourage the purchase of excess litter on the other?

These provisions could be included in the regulation outside the general permit section so that they are applicable to all litter transfers, whether made by the farmer or by the broker. This new section could require anyone who use litter to do so in accordance with the fact sheet or a nutrient management plan.

Add a definition of "Broker" which means anyone receiving poultry waste that sells or gives away said waste for ultimate use or disposal.

Response: The regulation will be modified to delete the requirement that the recipient of the poultry waste certify that he will utilize the material in accordance with the recommendations of the fact sheet. The end user will still receive a copy of the nutrient analysis and the litter management fact sheet. This change may address the concern about end users being afraid to take poultry waste for fear of government regulation. It is important to note, however, that if their use of the poultry waste results in pollution of state waters, these persons are still subject to the full authority of the Board under the pollution prevention mandates of the State Water Control Law. Their activities are also subject to the provisions of the Agriculture Stewardship Act administered by the Department of Agriculture and Consumer Services.

Comment 5: Poultry processors grower assistance plans. The proposed regulation provides no guidance on the content of the processor plans or their annual reports. HB 1207 mandates inclusion of the processor plans in the Board's poultry waste management regulation. The regulations should specify what must be included in the plans the law requires the large poultry corporations to file with DEQ. The only way the state can make the corporations do their part in dealing with the large amount of poultry litter generated each year is to evaluate their plans. A legitimate evaluation can only occur if the final regulation establishes clear criteria and standards for what an adequate plan should contain.

Processor plans were never intended to be part of the regulation. HB 1207 requires the plans be submitted by January 1, 2000, whereas the regulation was not to be completed until October 1, 2000. If the legislation had intended integrator requirements to be included in the regulation, the plans would not have been due a full nine months before the regulations were completed. Further, it is not necessary to include integrator requirements in the regulation because they are self-executing under the law. If the Water Control

Board finds the plans to be inadequate or if a company fails to implement its plan, the company would be in violation of the law. DEQ has had the processor plans for 6 months and has not notified any processors that their plans were deficient. Therefore, they must have been acceptable.

Processors have already begun implementing their plans. The toll-free hot line is functional and the industry is working with state agencies to develop a training program for growers that will begin early next year. One of the processors has begun a major alternative use project that will use over 50,000 tons of litter per year in production of a fertilizer product. All of the processors are in various stages of adding phytase to their feed to reduce phosphorus in the growers' litter. More detailed regulatory requirements may hinder these and other pending developments.

Response: DEQ's interpretation of the language of HB1207 regarding the poultry processor requirements was explained in a memorandum to the State Water Control Board from Richard Ayers dated February 16, 2000. In that memo and in this response to comments, the DEQ maintains its position that the law does not require that processor plans be included in the regulatory program. These provisions of the law are self implementing and further detailing processor requirements in the regulation could limit the ingenuity and innovation intended by the broader statutory mandate. Furthermore, since the law required that the processor plans be submitted 9 months before the regulatory program was to be in place, there should be no expectation that the two would be combined. The processors have filed the plans required by the law and are implementing them. The statute provides for DEQ to report to the Governor and the General Assembly on their progress by December 31, 2003. At the end of this three year implementation period would seem to be the most appropriate time to consider stricter controls on the processors should they not be making satisfactory progress.

Comment 6: 25-year, 24-hour storm. The regulation should specify the 100-year, 24-hour storm instead of the 25-year, 24-hour storm as the "no discharge" criterion. There have been numerous "100-year" storms that caused animal feeding operations problems. The regulation should be established so that the likelihood of discharges due to these storms is minimized.

Response: The 25-year, 24-hour storm event is widely used as the criterion to differentiate between regulated and unregulated discharges from animal feeding operations. The Virginia Pollution Abatement Regulation, 9 VAC 25-32-10 et seq. the Virginia Pollutant Discharge Elimination System Permit Regulation, 9 VAC 25-31-10 et seq. and the federal NPDES regulation, 40 CFR Part 122 all use this storm event as their animal waste "no discharge" criterion. In order to maintain consistency with these other regulations, the 25-year, 24-hour storm event will continue to be used in the VPA General Permit for Poultry Waste Management.

Comment 7: 200 foot buffer between application sites and occupied dwellings. **Keep this buffer because it protects the occupants from nuisances like flies and odor. Often, wells on adjoining property are closer to the fence than the house. There should be a time limit after the litter is spread on a field when the farmer has to plow it into the ground. This is for both air and water quality.**

Delete this requirement because it is not mandated by the law and it has no apparent relation to protecting water quality. The land in this buffer will either not be fertilized or will have to receive commercial fertilizers.

Response: **The 200 foot buffer from occupied dwellings has been used in individual VPA permits for land application of sewage sludge and animal wastes for many years. It is also a requirement of the CAFO general permit. This buffer is established as part of the Board's and DEQ's overall commitment to the protection of human health and environmental quality. Poultry litter may contain potentially pathogenic bacteria, viruses and fungi. These organisms can be transported on dusts or as aerosols beyond the immediate site of applied litter. Thus, established buffer distances should be required for land application of this material. The general permit allows for reduction or elimination of this buffer if the occupant of the dwelling agrees.**

Comment 8: Other buffers. **The buffer between land application sites and surface waters should be increased from 50 feet to 100 feet to avoid runoff.**

The 50 foot buffer from limestone rock outcrops will mean that litter application will be prohibited on many acres of pasture. Since rocky land is less desirable anyway, this will further reduce the land's productivity and value.

Response: **The proposed buffer zones from surface waters, wells and springs, rock outcrops and sinkholes are consistent with those currently imposed in the general permit for confined animal feeding operations with liquid waste and those recommended for individual VPA and VPDES permits for land application of animal waste and sewage sludge. They are adequate to protect water quality without being excessive. The final regulation will contain the same buffer zones.**

Comment 9: Land application during inclement weather. **Keep the condition that prohibits the cropland application of litter at times when the fields were frozen, covered with ice or snow, saturated with water or when crops were not growing on the field and would not be planted within 30 days of the litter application. Since the nitrogen in the litter is released in the first weeks after application there needs to be a crop growing there to take it up so that**

it doesn't just leach into the ground water or runoff to streams or rivers. If the ground is frozen and there is no crop, then nutrients will runoff.

Proper timing of poultry litter applications to coincide with expected periods of crop uptake of nitrogen is as critical as the rate of application in order to minimize runoff, leaching and volatilization losses as mandated by the law. Research studies have indicated that fall and early winter applications of organic nutrient sources such as poultry litter are prone to greater levels of nitrate leaching, which can impact the quality of ground water and base flow water entering streams. Mineralization of organic nitrogen in poultry manure can occur at temperatures as low as 0°C. The 30 day window for application could be increased to 45 days and still protect water quality, but allowing land application more than 45 days prior to the expected crop planting date would likely compromise water quality.

Delete this provision because the farmer needs more flexibility to decide when to spread the litter. If the ground is frozen in the morning, but thaws later in the day, the only time the farmer can operate his machinery on the soil may be when it's frozen. Do not equate the runoff potential of dry poultry litter with liquid dairy or swine manure. These restrictions from the CAFO general permit are not applicable here.

Organic sources of nutrients are temperature sensitive. They require warm weather to become plant available. Leaching of organic sources of nutrients is minimal during the winter months.

30 days is not enough of a window for the farmer to spread his litter and get a crop planted. Complicating factors such as preparing for a new flock, weather and the demands of other farm activities may make it impossible to meet this requirement. Producers should have the flexibility to decide when and where to apply litter. Sometimes frozen or snow covered ground offers the best opportunity to get into the fields in the winter. The permit should allow spreading of waste anytime as long as the soil and weather conditions do not indicate a potential for runoff.

Changing from commercial fertilizer to poultry litter requires much larger quantities of material be applied to achieve the same nutrient value. This means it takes longer to land apply litter than it does commercial fertilizer. The fastest one can expect is 30 to 50 acres per day, assuming the material is already on site and there is a minimum of down time. On the other hand, a commercial fertilizer spreader can cover 300 to 500 acres per day. The regulation and the litter fact sheet must provide enough time to get the job done. Farmers should be given up to 120 days before planting to spread litter.

Response: The permit requirement in question was derived from the general permit for confined animal feeding operations with liquid waste. Since poultry litter is considered a dry waste, the language of the permit will be modified to reflect the difference between dry and liquid wastes in their potential to cause pollution when land applied during inclement weather. The new permit condition will rely on the waste application schedule established in the farm's nutrient management plan. It will then identify times during that schedule when land application would not be allowed due to inclement weather. The permit will allow application of waste to frozen ground, within the NMP window, provided the site has certain other characteristics such as minimal slope, increased buffers to waterways, and absence of ice, snow cover or water saturation. This reflects a long-standing practice in individual VPA and VPDES permits that allow limited land application of solid wastes or sewage sludge to frozen ground. The permit will still require that vegetation or crop residue be present and be sufficient to reduce surface runoff and leaching to ground water.

Comment 10: Phosphorus rates in nutrient management plans (NMPs). The October 1, 2001 requirement for phosphorus-based NMPs should apply to all plans in effect after that date, not just those written after that date. What will DCR's phosphorus application rates be after December 31, 2005?

Application of nutrients in excess of crop needs should be permitted until the soil content meets recommended levels. Otherwise, the application rates should be based on Virginia Tech's soil test results.

Discriminate between soluble, bioavailable phosphorus and total phosphorus in the monitoring requirements. Soluble, bioavailable phosphorus is the nutrient in runoff. The regulation should say that *soluble* phosphorus rates shall not exceed crop nutrient needs/removal. It is the excess soluble phosphorus that is responsible for surface water eutrophication. If poultry litter is amended with aluminum sulfate to reduce ammonia volatilization, the spent litter will have a higher nitrogen content and a reduced soluble phosphorus content.

Response: The requirements for phosphorus application rates are verbatim from HB1207 at § 62.1-44.17:1.1 C 2 b and c. DEQ is not at liberty to amend these provisions that were so specifically adopted by the General Assembly. The nutrient application rates for individual farms covered by the general permit will be specified in their nutrient management plans. The methods specified for monitoring nitrogen and phosphorus detect the total, elemental N and P. Conversion to appropriate applications rates of N and P₂O₄ is done during the development of the NMP.

Comment 11: Reporting of monitoring results. All results of monitoring of soil and waste done for permit compliance should be sent in to DEQ for evaluation. Lack of central

record keeping and data assessment virtually guarantee that DEQ will not be able to find negative impacts.

Growers consider some of this information proprietary. Access by other farmers to information on soils analysis could prove harmful to a grower's competitiveness. This information should be maintained on the farm and made available to DEQ inspectors, who will determine whether or not the NMP is being implemented properly.

Response: The results of soil and waste monitoring will be available to DEQ when the operation is inspected annually. The inspector will verify that the testing was done according to the permit requirements. The primary use of the actual test results is for development of future NMPs for the farm. This information will be made available to the grower's plan writer when the plan is revised every three years. There is no benefit to having the results of soils and waste nutrient analyses submitted to DEQ.

Comment 12: Annual analysis of waste nutrients. To ensure that poultry waste is applied at appropriate agronomic rates, the requirement for annual waste monitoring should be retained. With ongoing variations in the feed content, the characteristics of the waste may be variable.

Annual nutrient analysis of litter is not necessary. With the consistency in feed formulations the nutrient content of the waste does not change enough to warrant this. Testing every 3 years is often enough.

Annual testing of waste will lead to new laboratories getting into the business of testing. This increase in the number of labs will add a variable to the reliability of the nutrient data that does not currently exist. Now, most testing is done by a few labs and the results are reliable and comparable.

Include USEPA Sludge Methods and Standard Methods in the acceptable methods for soils and manure analysis. Also, reference a source for the farmers to obtain the methods cited in the draft regulation.

Response: The frequency of analysis for soils at land application sites in the draft general permit was once per three years, while the waste was to be tested annually. This disparity in testing frequencies was proposed by the Poultry Advisory Group. Since then, certain members of the Group who were proponents of annual waste testing have recommended testing every three years. Based on the arguments of commenters with a technical background in the nutrient management field, the frequency for waste analysis will be changed to once per three years to match the soil testing frequency.

Test methods other than those in EPA regulations and the Standard Methods publication were proposed in this general permit because experience with the CAFO general permit shows that the EPA and Standard Methods are more appropriate for water than for soils and animal waste. The methods specified in the general permit are used routinely by labs in the southeastern US for analysis of nutrients in soil and manure. Use of these methods, as opposed to the EPA and Standard Methods, will add a degree of consistency and comparability to the data that would otherwise be impossible. Copies of the methods listed in the permit will be available at each DEQ regional office if permittees wish to review them.

Comment 13: Soil nitrate testing. **This test was recommended by the DCR participants on the Poultry Advisory Group. It provides crucial information to assess areas that may be potential sources of nitrate contamination of ground water.**

Soil nitrate testing is not necessary in this regulation. The test is highly variable and is not appropriate for monitoring over-application of nutrients. It is only benefit is to give the farmer a snapshot of the nitrate levels in a field.

Response: **In light of comments received from persons with technical expertise in the field of nutrient management, including DCR, the requirement for nitrate testing of soils planted in corn and small grains has been deleted.**

Comment 14: Adjoining landowner notification. **The notice to adjoining landowners should also extend to holders of leases on shellfish beds adjoining the poultry growing facility. Their livelihood will be impacted if the poultry waste is mismanaged on uplands adjacent to their leases.**

Eliminate the notice to adjoining property owners. These recommendations are already built into building permit application regulations.

Response: **The notification of adjoining landowners and residents that an operation is expanding by constructing new poultry growing houses is consistent with the requirement placed on dairy and swine producers by the CAFO general permit. This includes limiting the notice to owners and residents of the adjoining property. Lease holders would not be notified unless they are identified on the tax records of the locality or are otherwise known to the poultry grower. Notification of neighbors through issuance of building permits is a local option and would not have the same universal effect as this general permit requirement. The notice requirement will remain in the regulation as drafted.**

Comment 15: Litter fact sheet. **The litter fact sheet and nutrient analysis should be given to all recipients, not just those who get more than 10 tons.**

The fact sheet should not cause potential users of poultry waste to decide against it. It should give general recommendations for land application rates based on soil tests. Application rates should be based on nitrogen for fields that test low or medium for phosphorus. It must not contain recommendations more stringent than those in a state-approved nutrient management plan.

The fact sheet should be limited to general information on litter sampling, soil sampling, spreader calibration, storage of litter and water quality buffering. Do not attempt to include all the requirements of the regulation in the fact sheet. The spreading schedule in the fact sheet doesn't account for weather variations across Virginia. If farmers are restricted to this schedule, they may not use litter at all because they need to get on the fields when the weather allows, not according to some one size fits all, arbitrary schedule.

The fact sheet should be approved by DCR or at least the regulation should specify that it is a joint DEQ/DCR fact sheet. The technical content of the fact sheet overlaps with DCR's nutrient management plan responsibilities elsewhere in the regulation. It is important that potential conflicts between the fact sheet and the NMPs be eliminated.

The fact sheet's explanation of how to determine acceptable P-based litter application rates is seriously flawed and must be revised. The process of determining acceptable phosphorus rates must begin with a soil nutrient analysis. Then a fertilizer recommendation can be obtained based on the soil test results. It is not appropriate to assume that all soils will test high and restrict the amount of phosphorus that can be applied. By doing this, the producer may under-apply phosphorus to crops, leading to yield loss and higher costs for commercial nitrogen fertilizer.

Limiting litter applications to 1 ton per acre is not cost effective. Litter must be spread at least at 2 tons per acre to justify spreading costs. This is a particular concern for small grain farmers in Piedmont Virginia.

There must be an alternative to following the fact sheet other than development of a full-blown nutrient management plan. A soil test-based phosphorus fertilizer recommendation should be sufficient to determine litter application rates. Someone at Virginia Tech who is familiar with P and N-based nutrient management issues should be consulted to revise the fact sheet.

Response: **The regulation proposed limiting the distribution of the litter fact sheet to those who receive more than 10 tons of waste because persons buying or taking less than that amount would be engaged in small farming or gardening activities that would not pose significant threats to water quality. Nothing in the regulation prohibits distribution of the fact sheet to all litter recipients, but it is not required for these small transactions.**

The other comments regarding content of the litter fact sheet will be considered when the fact sheet is revised. Since the fact sheet is not a part of the regulation, its content is not critical to the rulemaking before the Board. DEQ is determined to produce a fact sheet that provides the litter recipient with enough information to store and utilize the litter in an environmentally responsible way without being overly complicated or intimidating. The revised litter fact sheet will be available for distribution to growers when they apply for coverage under the general permit.

Comment 16: Submittal of Nutrient Management Plans with Registration Statements. **The NMP is a part of the farm business plan and as such is a private document. Submitting it to DEQ would open it up to the public and potential harassment and reveal secret business information to competitors. Poultry farmers feel that the plans are confidential and should not be subject to the Freedom of Information Act. The plans will be made available to DEQ inspectors when they visit the farm. All the farmer should have to send to DEQ is a letter from DCR approving his NMP.**

Response: **A nutrient management plan submitted as an addendum to a permit application does not qualify as a "secret formula, secret process or secret method". Therefore, according to the State Water Control Law at § 62.1-44.21, the NMP cannot be held as a confidential document under the Virginia Freedom of Information Act. Furthermore, farmers covered under the CAFO general permit have been required to submit their NMPs since 1998 with no apparent adverse impact. Having the NMP on file at DEQ allows the permit writer and the inspector to have a better understanding of the operation covered by the permit. When the inspector arrives at a farm without having read the NMP, the inspection takes more of the growers time than if the inspector had read the NMP beforehand.**

Comment 17: Disposal of dead birds. **The regulation prohibits burial of partial flocks and daily mortalities. Sometimes burial in a pit is the only practical solution for emergency disposal of a large number of birds. At a certain level of mortality, use of composting or a rendering plant becomes infeasible and burial is the only option. The prohibition places a potential hardship on growers and may cause worse environmental problems by eliminating what could be the only disposal option. Properly constructed and sited burial pits should be allowed in these emergency cases.**

Response: The Code of Virginia at § 3.1-743 provides for disposal of dead poultry by one of four methods: disposal pit; incineration; composting; or rendering. The Virginia Department of Agriculture and Consumer Services (VDACS) has promulgated a regulation, 2 VAC 5-200-10 et seq., that pertains to disposal of entire flocks of dead poultry. This regulation is limited in its applicability to disposal of entire flocks. The draft poultry general permit regulation recognizes this provision of the VDACS statutory and regulatory code. However, when fewer than an entire flock of dead poultry must be disposed of and a disposal pit is the method of choice, the requirements of the Virginia Solid Waste Law at § 10.1-1408.1A and the Solid Waste Regulation, 9 VAC 20-80-10 et seq. apply. The solid waste law and regulation require that all solid waste be disposed of in a permitted solid waste landfill. Disposal of solid waste without a permit is strictly prohibited. Any discarded material, including dead poultry, is considered solid waste. Agricultural activities are not exempted from these requirements. It is for this reason that the general permit prohibits coverage of growing operations that utilize disposal pits for daily mortalities. These operations would have to apply for an individual VPA permit that would take into consideration the increased potential for adverse impacts to ground water associated with routine, daily burial of dead poultry. They would also be required to obtain a solid waste landfill permit for the disposal pit.

In recognition of the possibility that a poultry growing operation may have a die-off of a significant part of a flock, but would not be able to qualify under the statutory exemption for entire flock burial, the regulation will be modified to allow disposal pits for emergency burial of dead birds when the disposal is done either under the entire flock exemption of the Agriculture Law or the solid waste permitting requirements of the Solid Waste Law. This change maintains the prohibition against burial of daily mortalities, but allows emergency burial as long as it is done according to these statutes and their implementing regulations.

Comment 18: Regulations must not be overly burdensome. Executive Order 25-98 requires that all regulations be developed on the presumption that they are the least burdensome and intrusive regulation possible. This regulation goes beyond the statutory mandate and therefore, is overly burdensome. The Water Control Board should use common sense and good science in adopting the regulation. The majority of farmers and poultry growers are currently following good management practices. Increasing the regulatory burden on them could cause them to go out of business.

Response: The requirements of this general permit are the least burdensome possible given the statutory mandate of HB1207. An underlying consideration of the DEQ staff throughout the rulemaking has been to design a regulation that would impose no new restrictions on an already environmentally responsible poultry grower.

Comment 19: Operator training. **Training operators every three years will be a waste of time. They can learn what they need to know at a one time training session. After that, they can get updates through regularly scheduled Extension Service seminars.**

Response: **After further consideration of the need for and benefits of continuing training, the regulation has been modified to require only one training session for operators covered under the general permit. Ongoing contact with DEQ inspectors, extension specialists and integrators' representatives should provide the continuing education as or more efficiently than follow-up training sessions.**

Comment 20: Biosecurity and DEQ inspections. **The draft regulation gives DEQ inspectors wide latitude for access to farms. DEQ must work closely with the industry to develop protocols that will protect poultry health and the economic wellbeing of the industry.**

Response: **DEQ is currently developing an internal guidance document for implementation of this general permit. The biosecurity practices to be followed by inspectors when they visit poultry growing operations will be a part of that guidance. DEQ is working with industry representatives to develop these practices.**