

July 16, 2001

Concentrated Animal Feeding Operation Proposed Rule
USEPA Office of Water
Engineering and Analysis Division (4303)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Proposed CAFO Rule

Attn: Comment Clerk

This submittal and attached documents represent the comments of U.S. Poultry & Egg Association (USPOULTRY) on the proposed rule. USPOULTRY is a trade organization dedicated to three tenets – research, education and communication. For example, USPOULTRY is a founding member and partner with EPA in the Poultry Water Quality Consortium with USDA-Agricultural Research Service, USDA-NRCS and TVA. The mission of the consortium is to promote education and information exchange on environmental stewardship and pollution prevention in the poultry industry and poultry producing areas. We sponsor the International Poultry Exposition each year, the world's largest poultry and egg trade show with approximately 25,000 attendees. We provide numerous industry-wide training programs on HACCP, a program designed to further enhance food safety. We offer seminars on virtually every aspect of poultry production and processing, including an annual environmental management seminar. We award grants for approximately \$1.2 million/year in poultry related research. These grants have included almost \$1 million in environmental research related to poultry production and processing in recent years; much of this research is being used today as the basis of enhanced nutrient management efforts. Our membership consists of integrators, processors, producers and allied industries in all poultry (broiler, duck, layers, turkeys) species.

Please note we have no lobbying arm – i.e., we have no direct representation on Capitol Hill. That is the mission of other able organizations. We do, however, comment upon regulatory issues on both the state and federal level.

Over the last few years, as discussions concerning Animal Feeding Operations occurred across the country, we observed that there was a lack of baseline data concerning the size of poultry farms, and the ultimate disposition of litter from these farms. To fill this informational void, USPOULTRY, in concert with the National Chicken Council and the National Turkey Federation, undertook a nationwide survey of broiler and turkey growers. A sample of that survey form is included as Attachment #1.

We were, frankly, overwhelmed with the response. We received detailed information from approximately 16,000 poultry farms, which, we believe, represents over half of the broiler and turkey growers in the nation. Summary results from that survey are included as Attachment #2. In the specific comments below, we have utilized the information contained in our database to support our positions.

Specific comments are as follows:

1. The “dry litter” permitting exemption should be maintained and expanded to cover any species generating dry litter.

The current regulation provides an exemption to broiler and layer operations not utilizing “continuous overflow watering”, or, in other words, operating on a dry litter system. Dry litter, by its very nature of being dry, poses inherently less risk than wet litter systems. EPA itself recognizes this fact numerous places in the preamble and proposed rule in supporting the conversion of wet litter to dry litter systems in several categories. The use and application of dry litter in normal farming operations is virtually identical to that of granular commercial fertilizer. Dry litter is a valuable nutrient source, not a waste product as EPA describes it. Indeed, it generates additional family farm cash income from sale for many growers. EPA does not presume widespread misapplication of commercial fertilizer, similarly, it should not presume the same with respect to dry litter.

• **Poultry Growers are Properly Managing Litter**

The proposed rule attempts to justify removal of the “dry litter” exemption by stating that poultry growers tend to have smaller farms than other species, and are therefore less capable of handling the litter which is generated at the farm. While we have no data on farms from other species, the survey we conducted disputes this representation with respect to poultry growers. The survey found that dry litter broiler growers have an average farm size of 159 acres, with an average of 63,807 birds. The survey also found that only 43% of the litter generated by a grower is used on his agricultural land. The remainder is sold (34%), traded out (17%) or otherwise used or processed (6%).

This data can be used to generate an industry wide average nutrient application rate as follows:

Available Acreage: 159
Birds/Grower: 63,807/flock
Litter Generation: 2 lb/bird
Flocks/Year: 6.5
Total Annual Birds/Grower: 414,745
Total Annual Litter Generation: 829,491 lb
Total Annual Litter Used On-Farm: 356,681 lb
Average Litter N content: 2.98% (UGA data, Attachment #3)
Nitrogen Utilized On-Farm: 10,629 lb/year
Annual Nitrogen/Available Acreage: 66 lb/acre/year
Average Litter P Content: 1.45% (UGA data, Attachment #3)
P Utilized On-Farm: 5,171 lb/year
Annual P/Available Acreage: 32 lb/acre/year

Against this application rate must be balanced the nutrient demand for the forage and crops being raised by poultry growers. Based on the survey data, and published (Attachment #4) EPA crop uptake rates, we have calculated an overall nutrient uptake rate and included those calculations herein as Attachment # 5. This information is provided in summary below:

Table I: Overall Nutrient Uptake vs. Application Rate

	Nitrogen <u>(lb/acre)</u>	Phosphorus <u>(lb/acre)</u>
Overall Nutrient Uptake Rate (Attachment # 5)	358	45.3
Available Litter Nutrients (from above)	66	32
Net Deficit	(292)	(13.3)

This analysis demonstrates that, on an industry-wide basis, that EPA's assumption that inadequate acreage exists on poultry farms for the agronomically sound and environmentally benign application of litter is untrue and unfounded in fact. Since this assumption is so basic to EPA's position that dry litter should be regulated, we strongly urge EPA to consider this new data and withdraw its proposal to encompass dry litter operations in the CAFO regulation.

- **Voluntary Programs Already Implemented**

The above analysis also demonstrates that the entire poultry community (e.g., growers, integrators, extension service and university personnel) have properly and adequately responded to concerns raised by EPA and others over the last several years through the Poultry Industry Dialogue, United National Strategy for Animal Feed Operation, etc. Our community has worked together to find and implement voluntary, pro-active measures to insure nutrient supply and demand on poultry farms is in balance. As a poultry community, we have educated ourselves on nutrient management planning, with literally thousands upon thousands of growers receiving nutrient management training. Included as Attachments #6 and #7 are testimonials regarding the effectiveness of this nutrient management training in two large poultry producing states, Georgia and North Carolina. Examples of other states' programs can be provided upon EPA's request. Also included is the voluntary Memorandum of Understanding implemented between the State of Delaware and five poultry companies (Attachment #8). The Delaware agreement describes in-place programs to ensure continued economic and environmental sustainability of Delaware poultry production. These documents are offered as proof that a broad, intrusive, stifling federal regulatory program is unnecessary to achieve the environmental benefits desired by EPA and, for that matter, the poultry community as well. This demonstrated industry commitment to nutrient management planning, combined with the uptake information provided above, obviates any need for EPA to regulate dry litter.

We recognize there are a few localized areas of the nation where litter supply – particularly with respect to phosphorus – exceeds demand. We would suggest, however, that these local issues are exactly that – local. They should not be addressed by a cumbersome federal regulatory program that imposes unnecessary burdens and costs on producers elsewhere in the nation, for no environmental gain. Further, we believe where these local situations do exist – the poultry industry and indeed, the free market system – are already voluntarily responding to address the issues. For example, on the Delmarva Peninsula, approximately 700,000 tons of broiler litter are produced each year. Three integrators – Allens, Perdue and Tyson – are constructing alternative litter handling facilities that will remove approximately 200,000 tons of litter a year from the Peninsula. Further, two independent businesses have set up alternate litter handling facilities that will demand another 120,000 tons/year of poultry litter. Together, these processes will remove almost 50% of the litter from the Peninsula. Similar activities are occurring in the Shenandoah Valley region of Virginia, and others are planned for the Northwest Arkansas/Southwest Missouri area. And these examples only represent the larger alternate handling projects underway or planned for those regions. They do not include the dozens of smaller compost or transport enterprises that have sprung up in recent years. These many projects, big and small, demonstrate that regulation is not needed, that voluntary efforts – and the value of litter itself – are already directing litter away from areas of nutrient excess.

- **Production Practices Changes Have Lessened Environmental Risks**

The proposed rule further attempts to justify the elimination of the dry litter exemption by stating that significant changes in poultry production practices have occurred, which in turn have resulted in a shift from wet to dry litter systems, allowing many hen and broiler facilities to avoid regulation under the current rule. EPA further states such shifts have resulted in not all poultry operations being handled equitably (i.e., turkey operations do not have a similar exemption).

The broiler industry has been producing dry litter from the late 50's forward. The broiler industry was already "dry litter" when the original rule was implemented. Quoting from EPA's original rule preamble "...dry operations account for the vast majority of commercial poultry operations....dry operations, for lack of a discharge subject to the Act, will not be subject to NPDES requirements" *38 Federal Register 18001*. The industry has not moved to dry litter systems to avoid EPA's regulatory umbrella. As EPA clearly recognized in 1973, the broiler industry production practices preclude the need for NPDES permits.

In contrast, when the original rule was promulgated, a majority of turkey production was conducted in open ranges: 10,000 – 15,000 birds were raised on 15 - 20 acre open lots, largely denuded of vegetative cover. The turkey industry has shifted to enclosed houses and does now produce a dry litter similar to broiler litter. Current production practices in enclosed housing and production of a valuable co-product (litter) represents a far superior environmental practice than what was in place at many turkey farms when the original regulation was adopted. In fact, the record suggests EPA never intended to regulate housed turkey production: "Generally, only 'open lot' turkey operations will be covered as in-house turkey facilities are normally dry operations and have no liquid wastes" *38FR18000*. While we agree that similar regulations should apply to all sectors of the poultry industry, we would propose this

to be accomplished by clearly expanding the dry litter exemption to turkey operations (and other species as such technologies develop). The National Pollutant Discharge *Elimination* System is intended to foster *elimination* of discharges where practical. This has certainly occurred with respect to the turkey industry today versus twenty-five years ago. The turkey industry should now be recognized for that progression by a similar dry litter exemption from regulation.

The egg industry as well has – and still is – shifting to dry litter systems. Whereas wet litter systems were by far predominant in the early 70's, deep stack dry systems are now recognized as the industry standard, and wet handling systems are rapidly disappearing. As the farms have shifted to dry litter, they have enjoyed the benefit of avoiding unnecessary regulation. The proposed rule seeks to eliminate that benefit. It should be noted that the shift from wet to dry litter systems in the egg industry has not been driven by a desire to escape regulation. Rather, the shift has occurred because dry operations are more productive. The egg industry should continue to have the benefits of less regulation for this environmentally sound shift to dry litter systems.

- **Improper Storage Already Regulated**

EPA also cites improper storage of dry litter, exposing it to precipitation, as justification for expanding its regulatory umbrella to encompass this large section of the poultry industry. But the fact of the matter is that EPA and the states already have regulatory authority to take appropriate enforcement action in such situations. The poultry industry supports enforcement action against those few producers who do not properly manage their litter. EPA and the states do not need elimination of the “dry litter” exemption to address improper storage concerns.

- **Lack of Scientific Justification**

The proposed rule further attempts to justify eliminating this provision by citing national or regional numbers attributing water quality problems associated with agriculture. First and foremost, the statistics cited by EPA are flawed and inaccurate, which was well documented in the TMDL review process and was recently highlighted by a National Academy of Science study (Attachment #9). Rather than re-hash those arguments here, we have attached (Attachment #10) a summary article which highlights why we believe these numbers so grossly distort agriculture's impact on water quality. Further, the rule attempts to use this tenuous water quality link to regulate one sector of agriculture – animal ag – without providing any scientifically collected data to support why animal ag (and dry litter application in particular) should be so singled out in this extensive expansion of EPA's regulatory program. The flawed basis of this linkage is demonstrated when one considers that the largest water quality impairment attributed to agriculture is sedimentation, i.e., soil loss from agricultural lands due to plowing, erosion, etc. The application of dry litter to agricultural lands is not at all related to soil sedimentation losses (and, in fact, helps prevent erosion) and should not be used by EPA to justify expansion of its regulatory arena.

Finally, EPA offers anecdotes of alleged water quality problems associated with dry litter mis-use in order to justify elimination of the dry litter exemption. When looking over a 25 year history with literally thousands of growers, we do not dispute that such

anecdotes can be found. On the other end of the spectrum, we could offer anecdotes regarding the grower in North Georgia who has developed a thriving seedling business using his composted litter; or the grower in Arkansas who made his own deep pasture aerator to better distribute phosphorus in the soil profile, or the row crop farmer in Missouri who, in desperation to provide cash income to allow his daughter and son-in-law to remain on the family farm, built six poultry houses a decade ago and who, from day one, has employed precision control techniques for the combined application of litter and commercial fertilizer on his corn fields and has noted a significant yield increase. It is our belief, however, that anecdotes should not form the basis of a broad, intrusive regulatory program into the family farms of America. It is EPA's mandated responsibility to develop sound, science-based rationale to justify such regulation, and EPA has abdicated that responsibility by offering anecdotal episodes, rather than sound science, to support elimination of the dry litter exemption.

2. Animal Units should be based on nutrient production.

Nutrients are the primary water quality concern with respect to animal litter and manure. Any regulation of these materials should be consistent with the relative level of nutrient production by each of the species. Based on this premise, and nutrient production values contained in USDA SCS Agriculture Waste Management Field Handbook (1992), we calculated the nutrient equivalencies of broiler and layer species relative to the 1000 AU standard, and have included those calculations as Attachment #11. Further, nutrient management is a yearly mass balance, and broiler producers are without chickens 20% of the time. Therefore, an additional adjustment has been made to reflect the lack of nutrient production on a broiler farm approximately 20% of the year. The results of those calculations are as follows:

		<u>Nitrogen</u> <u>Basis</u>	<u>Phosphorus</u> <u>Basis</u>
Broilers:	1000 AU =	230,918 birds	164,011 birds
Layers:	1000 AU =	198,857 birds	108,995 birds

There is no scientifically sound rationale for EPA to treat nutrients present in poultry litter and manure differently than nutrients present in other animal manures. Consequently, we recommend EPA revise the conversion of 1000 AU to equal 164,000 broilers and 109,000 layers.

3. EPA grossly underestimates the number of poultry grower farms that would be regulated.

Provided in the table below are EPA's estimated percentages of affected broiler and turkey growers, compared to the number determined from our database. Also included is data if EPA properly revised the Broiler Animal Units to an equivalent nutrient basis.

Table II. EPA Estimated vs. Actual Permit Coverage

<u>Size Category</u>	<u>Broilers</u>		<u>Turkeys</u>	
	<u>EPA Estimate (%)</u>	<u>USPOULTRY Database (%)</u>	<u>EPA Estimate (%)</u>	<u>USPOULTRY Database (%)</u>
> 300 Animal Units	41%	76%	15%	55%
> 500 Animal Units	28%	53%	9%	36%
> 750 Animal Units	22%	34%	5%	17%
> 1,000 Animal Units	-	18%	-	8%
> 164,000 chickens	-	3%	-	

We do not understand how EPA's estimates could be so inaccurate as we are aware of data supplied to EPA by integrators in response to EPA queries concerning farm size. These individual integrator numbers are very similar to the information in our database.

We are also aware several other industry and academic groups are providing comments on the financial impact of these proposed rules on poultry operations. In reviewing these financial comments, EPA should recognize that a much greater percentage of poultry growers will be impacted than EPA's original estimate. Overall industry cost estimates should be adjusted accordingly; particularly with respect to OMB review thresholds for impact on small family farm businesses.

EPA specifically requests comments on a two-tier versus a three-tier permitting system. While we would favor a two-tier system over three-tier for the sake of simplicity, all of the animal unit numbers presented by EPA are unrealistic. We would suggest permitting thresholds of 164,000 broilers, 109,000 layers, or 55,000 turkeys, **but only for facilities which utilize wet litter systems.**

4. EPA is unfairly targeting the poultry industry in this proposal.

EPA has maintained, repeatedly and publicly, that the intent of the CAFO rule revision was to regulate only the larger 5 – 7% of AFO's, allowing voluntary, cooperative programs to be implemented for smaller producers. As the numbers in Table III below suggest, EPA is proposing to regulate the poultry industry on an order of magnitude higher than their public presentations have indicated, and at a much higher level than any other major animal agriculture group.

**Table III: CAFO Permit Coverage
Comparison of Broilers and Turkeys to Other Major Species**

Permitting Threshold Size	<u>Percentage Requiring Permit</u>					
	<u>Broilers</u>	<u>Turkeys</u>	<u>Cattle</u>	<u>Dairy</u>	<u>Hogs-GF</u>	<u>Hogs FF</u>
300 AU	76	55	4	6	9	15
500 AU	53	36	3	3	5	9
750 AU	34	17	2	2	4	5
1000 AU	18	8	2	1	3	4

There is no rational sound scientific basis for this discrimination against poultry producers. A pound of nitrogen or phosphorus contained in litter has no different environmental impact than a pound of nitrogen or phosphorus from hog or dairy or cattle manure or in a pound of nitrogen or phosphorus in unregulated applications of commercial fertilizer. Indeed, we would argue that litter application is clearly a more desirable alternative than application of commercial fertilizer. Given the environmental co-benefits with the agronomic application of litter makes EPA's disparity in regulating the poultry industry all the more vexing. Poultry growers, as demonstrated in Item 1 above, have adequate land area for agronomically and environmentally sound means of litter re-use. Further, there is an active, viable market in poultry litter sales available for the individual growers with excess nutrient relative to their need, as well as the previously mentioned alternatives being developed for growers in historically concentrated poultry production areas. Poultry growers must be treated equitably, and under this proposal, they clearly are not.

This invasive, far-reaching federal regulation into largely family owned poultry farms is even more perplexing when one considers the fact poultry facilities produce largely dry litter, which EPA is encouraging other species to adopt. EPA's blatant disparity in regulating the poultry industry could potentially cause other animal agriculture to avoid cleaner, environmentally sound dry litter technologies.

We believe EPA is engaging in this species discrimination because the industry is largely vertically integrated and, therefore, through EPA's co-permitting proposal (discussed later) easier for EPA to administratively address in the NPDES permit process. We object to EPA disproportionately foisting the additional financial burdens imposed by this extensive expansion of its regulatory program on our industry's growers and processors simply because we are a more convenient target.

5. EPA should not impose restriction on third party litter sales.

EPA proposes two options regarding the sale of litter or manure to third parties. The first option requires the grower to document the amount of litter/manure sold or transferred, the name of the recipient, and provide the third party with a nutrient analysis and a brochure outlining the recipient's litter management responsibilities. A second option additionally requires the grower to obtain from the third party user certification the litter/manure will be applied and utilized in an agronomic fashion.

- **Survey Surprise**

Perhaps the single biggest surprise to us in reviewing the grower survey we conducted is the percentage of litter leaving poultry growers' farms. The survey indicated 34% of the litter was directly sold by the grower, and an additional 17% was "traded out" with a broker, normally for fresh bedding material. This broker, in turn, will sell the litter to other agricultural producers in need of nutrients.

Prior to the survey, our sense of the industry – and we think most industry observers – was that around 25% of the litter left the farm. It is our belief that the discussion of potential environmental concerns in the last several years has resulted in such a large proportion of litter leaving the farm. As issues were raised – particularly with respect to soil phosphorus levels – the poultry community (i.e., growers, integrators, USDA Extension Service and university personnel involved in the poultry field) started reaching for and fully implementing solutions. The use of litter on various crops was studied, or old studies were dusted off and discussed and reviewed with row crop farmers. (USPOULTRY is proud to say it funded many of these studies.) The true value of litter based on its nutrient content – and its intrinsic values (better soil moisture retention, less salt build-up than organic fertilizer, improved soil tilth, slow release nitrogen erosion control) was assessed and promoted to others in the agricultural community. Litter is a natural product, not man-made from petroleum products – a finite resource. The use of litter adds carbon back to the soil and as a soil amendment can make previously non-arable land productive. It helps minimize erosion and lowers susceptibility to drought. The result of these educational and promotional efforts by the entire poultry community has resulted in increased markets for dry poultry litter. The use of litter on cotton and peanut fields and pine forest began; tractor trailer loads of litter from pasture-oriented North Georgia and North Alabama and North Arkansas were sold in row-crop oriented South Georgia and South Alabama and South Arkansas; industry expansion started occurring in row-crop areas where litter has higher value. Using the same cooperative spirit and work effort that has allowed the industry to grow over the years, the entire poultry community has attacked this issue. And, the survey information collected indicates that, on average, the problem is being solved. Further, this effort has had a great side effect – increased cash income for many growers from litter sales.

- **Regulating 3rd Party Sales Will Cause Environmental and Economic Disbenefits**

We can think of no more damaging action EPA can take to undo this good work than to place restrictions on the sale and use of poultry litter. Such restrictions will only cause the end-users of poultry litter to revert to inorganic commercial fertilizers. We do support providing a nutrient profile sheet to poultry litter buyers – like nutrient analysis on the back of a bag of fertilizer the homeowner buys or the fertilizer co-op provides a farmer. Any requirement beyond this is, we believe, unjustifiable as it places litter at a competitive disadvantage to inorganic commercial fertilizers, making it difficult to sell.

Beyond the adverse economic consequences on growers, this portion of the proposed rule clearly demonstrates the adverse unintended consequences when EPA, without agricultural expertise, dictates agriculture policy. Numerous studies have demonstrated higher nutrient runoff from fields fertilized with commercial

fertilizer than litter. One such study is included at Attachment #12. EPA action to regulate or restrict litter sales will result in substitution of commercial fertilizer, and subsequent higher levels of nutrient runoff. So, instead of enhancing environmental quality, the proposed rule potentially causes increased water quality problems.

Further, EPA should revise economic impact and cost/benefit data to properly reflect the consequences of regulating litter sales. Namely, the loss of cash income, or in-kind payments, from restrictions on litter sales need to be factored into economic impact and cost data, and further, the resulting environmental benefit value needs to be reduced to reflect the increased nutrient runoff from increased commercial fertilizer usage.

- **Improper Estimates for P Uptake Rates**

Please note that while we do not support the proposed recordkeeping requirements, we would like to point out that the 14.8 lb/acre phosphorus uptake rate EPA utilized in determining the “*de minimus*” threshold for recordkeeping is unreasonably low. Most small quantity litter sales go to non-agricultural forage usage -- i.e., rural lawns and horse pasture which will have a significantly higher uptake. Other EPA publications, including Attachment #4, indicate EPA has previously used substantially higher values.

- **Litter More Regulated Than Hazardous Waste?**

We believe that it is also worth noting that, under the Federal Resource, Conservation and Recovery Act, materials which otherwise would be considered hazardous waste are exempt from regulation 40CFR 261.2(e) should they be recycled as a substitute for a commercial product. In RCRA, EPA presumes that, despite whatever severe hazards a particular chemical may pose, its intrinsic value as a substitute for a commercial product guarantees it will be handled and conserved in a judicious manner. Surely poultry litter, purchased by farmers as a substitute for commercial inorganic fertilizer for use on their own land should enjoy this same presumption from EPA. We do not need more restrictive regulation for poultry litter than we do for hazardous waste.

6. Co-permitting needs to be removed from any proposed CAFO rule.

The industry has repeatedly explained to EPA its concerns regarding co-permitting. A review of these concerns is attached hereto (Attachment #13) and made a part of our comments. In sum, the poultry industry, which has been largely vertically integrated since well before the first CAFO rule and therefore has more experience with this system than any other animal ag group, fervently believes that:

1. Co-permitting will drive integrators (compelled to minimize potential liability exposure) to large investor-owned or company owned farms over time, at the expense of the family farmer.
2. Co-permitting will directly cause increased integrator involvement in non-poultry family farm operations.

Vertical integration of the poultry industry is an extremely successful model of modern agriculture production which other ag sectors are striving to emulate. It minimizes risks for the producer while insuring adequate supply for the processor. Like any other business enterprise, contract poultry production is not for everybody. But, most growers are satisfied with this arrangement. For example, a survey conducted by Auburn University's Center for Government Services indicated 80% of contract growers were satisfied with the contractual relationship with their integrator (Attachment #14). This level of satisfaction among its contractors is a record of which the industry is justifiably proud. Further, close to 60% indicated they felt compensation was adequate (Attachment #15). The point here is that growers, by and large, understand and are satisfied with their contractual relationship.

The co-permitting requirements contained in the proposal would forever change – and damage – that contractual relationship. The co-permitting proposal represents agricultural policy making, for which EPA is not qualified, rather than environmental policy making. In the end, new CAFO rules will be issued, adjudicated and then implemented. The industry will then comply with the law and whatever environmental benefits resulting from the rule will be realized. The increased cost of complying with the law will drive some family farms out of business. Inclusion of co-permitting will result in the exact same environmental benefits realized without co-permitting, but with the loss of many more family farms.

7. EPA should eliminate the watercourse set back requirement from the rule.

EPA has mandated an across the board, nationwide 100 foot setback from watercourses for applying litter or manure. Determination of appropriate watercourse setbacks to be protective of water quality is an extremely site-specific undertaking. It is influenced by a myriad of variables including soil type, terrain slope, erosion patterns, cover crop, cropping practices, etc. It is not amenable to being a regulatory “command and control” decision made out of Washington, D.C. Decisions on an appropriate setback for a farm should be done on-site, in the farm's nutrient plan.

The impact of mandating a 100 foot setback:

1. Unilaterally eliminates litter or manure application to countless acres across the nation where it could be applied in an environmentally sound manner.
2. Causes substitution of inorganic commercial fertilizer of higher nutrient solubility immediately adjacent to these watercourses. This will increase nutrient run-off (see Attachment #12). Rather than reducing environmental impacts, this requirement will create adverse environmental impact.
3. Unfairly stigmatizes litter and manure in the agricultural community since commercial fertilizer could be used wherever a farmer wanted, yet litter or manure would have to adhere to the setback. This stigmatization could undo the efforts of the poultry community described earlier to direct litter into new markets to avoid over application.

EPA should strike this provision from any subsequent proposed CAFO rule and allow the appropriate setback to be addressed in the nutrient management plan.

8. EPA should exempt dry litter operations (all species) from the certification of no groundwater/surface water connection.

The proposal is primarily aimed at new lagoons and production areas where the presence of wastewater raises the possibility of pollutants, release via groundwater connection to surface water. Dry litter operations have no free moisture, and further, occur in enclosed structures not subject to precipitation. Therefore, these farms should be exempted from having to incur considerable costs to obtain this certification.

We believe that the poultry industry – as a result of the Dialogue, etc. – has actively listened to EPA regarding its environmental concerns and learned from that exercise. We believe, as illustrated by the examples in this submittal, that we have acted positively, voluntarily and pro-actively to allay and address those concerns. However, in reviewing the proposed CAFO rule, it is apparent that listening occurring during these sessions was solely a one way street. EPA has virtually ignored the issues raised by poultry growers and processors in this proposal, and produced a document that gives us grave concern about the future viability of the thousands of family farms that make up our industry. Although we have commented on the proposal herein, we believe this proposed rule is unsalvageable. We urge EPA to pull back this proposed rule and again sit down with USDA, the growers, the integrators and other interested parties to craft a rule that is both practical and environmentally protective, and builds upon the voluntary program the industry has already implemented. We recognize EPA has a court-ordered schedule for issuing the final rule but, frankly, this would not be the first deadline EPA has ever missed nor the last. And we believe missing the deadline would be a vastly preferable alternative than this nation waking up one morning in the not too distant future only to find that its domestic markets for corn and soybeans have been greatly reduced; and that much of the poultry it consumes is not from a USDA inspected facility but is imported.

We are available to review these comments, or provide additional information to EPA at your request.

Sincerely,

John E. Starkey, P.E.
Vice President, Environmental Programs
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JES:eh

cc: Don Dalton
Board of Directors
Environmental Impact Committee
State Associations

ATTACHMENT #5

OVERALL AVERAGE NUTRIENT UPTAKE RATE FOR POULTRY GROWERS
UTILIZING LITTER ON THEIR OWN FARM

Source of Uptake Data: Land Treatment of Municipal Wastewater,
U.S. Environmental Protection Agency,
EPA 625/1-81-013 10/81, Table is Attachment #4

I. Row Crops

Most predominant crop: corn

N Uptake: 155-172 lb/acre use 163.5 lb/acre

P Uptake: 17- 25 lb/acre use 21.5 lb/acre

II. Forage Crops

Most predominant forage: Bermuda grass; Bermuda grass with rye overseed,
Fescue, bluegrass

II.A. Bermuda grass uptake:

N Uptake: 350-600 lb/acre use 475 lb/acre

P Uptake: 30- 40 lb/acre use 35 lb/acre

II.B. Bermuda grass with rye overseed:

Add rye grass uptake values to Bermuda grass uptake values

Rye grass uptake:

N Uptake: 180-250 lb/acre use 215 lb/acre

P Uptake: 55- 75 lb/acre use 65 lb/acre

Combined Bermuda grass with rye overseed:

N Uptake: 475 lb/acre + 215 lb/acre = 690 lb/acre

P Uptake: 35 lb/acre + 65 lb/acre = 100 lb/acre

II.C. Fescue Uptake:

N Uptake: 135-290 lb/acre use 210 lb/acre

P Uptake: 26 lb/acre

II.D. Bluegrass Uptake:

N Uptake: 180-240 lb/acre use 210 lb/acre

P Uptake: 40 lb/acre

II.E. "Blended" Hay/Forage Nutrient Uptake

Assume 25% of growers are using each forage alternative

Blended Forage/Hay N Uptake = 25% Bermuda grass uptake + 25% Bermuda grass/rye overseed uptake + 25% Fescue uptake + bluegrass uptake

$$= 0.25 (475 \text{ lb/acre}) + 0.25 (690 \text{ lb/acre}) \\ + 0.25 (210 \text{ lb/acre}) + 0.25 (210 \text{ lb/acre})$$

$$= 396 \text{ lb/acre}$$

Blended Forage/Hay P Uptake = 0.25 (35 lb/acre) + 0.25 (100 lb/acre) + 0.25 (26 lb/acre) + 0.25 (40 lb/acre)

$$= 50 \text{ lb/acre}$$

III. Overall Uptake Rate

Survey results indicated that 43% of litter is applied to the growers own fields. Forage/hay production represent 36% and 7% to row crops. An overall uptake rate can then be calculated as follows:

$$\text{Overall Nutrient Uptake} = \frac{36}{43} (\text{forage/hay uptake}) + \frac{7}{43} (\text{row crop uptake})$$

For Nitrogen Uptake, this yields

$$\text{N Uptake} = \frac{36}{43} (396 \text{ lb/acre}) + \frac{7}{43} (163.5 \text{ lb/acre})$$

$$= 331 \text{ lb/acre} + 27 \text{ lb/acre} \\ = 358 \text{ lb/acre}$$

$$\text{P Uptake} = \frac{36}{43} (50.0 \text{ lb/acre}) + \frac{7}{43} (21.5 \text{ lb/acre})$$

$$= 45.3 \text{ lb/acre}$$

ATTACHMENT #2

USPOULTRY/NCC/NTF
GROWER ENVIRONMENTAL SURVEY

Summary Results

GENERAL INFORMATION

Number of Growers Represented	16,311
Number of Processors Represented	26
Number of Houses	52,156
Average Houses/Grower	3.19
Average Birds/Grower	62,678
Average Birds/House	19,214
Average Farm Acreage/Grower	162
Litter Utilization	
Litter to Growers' Pasture	36%
Litter to Growers' Row Crop	7%
Litter Sold	34%
Litter "Traded Out"	17%
Litter – Other	6%
Litter Storage ¹	
Litter Storage Shed	28%
In-House Storage	66%
Temporary Tarping	9%

¹Some growers use more than 1 method.

ATTACHMENT #11

CONVERSION OF 1000 AU FOR BROILER AND LAYERS

1. Determine nutrient output of 1000 head beef

Source of data: USDA Agricultural Waste Management Field Handbook

Assume Weight Beef Cattle = 1000 lb/head

- A. N output: 0.31 lb/day/1000 lb

Daily N output, 1000 AU = 0.31 lb/day/1000 lb $\times \frac{1000 \text{ lb}}{\text{Animal Unit}}$ \times 1000 Animal Unit

$$= 310 \text{ lb N/day}$$

Annual N output, 1000 AU = 310 lb N/day \times 365 = 113,150 lb

- B. P output: 0.11 lb/day/1000 lb

Daily P output, 1000 AU = 0.11 lb/d/1000 lb $\times \frac{1000 \text{ lb}}{\text{AU}}$ \times 1000 AU

$$= 110 \text{ lb/day}$$

Annual P output = 110 lb/day \times 365 = 40,150 lb

2. Determine Equivalent Number of Broilers

- A. N output = 0.68 lb/d/1000 lb

Average weight = 2.5 lb

of birds equivalent to 1000 lb = 400 birds

N output/bird = .68 lb/d/1000 lb $\times \frac{1000 \text{ lb}}{400 \text{ birds}}$

$$= 0.0017 \text{ lb/d/bird}$$

Average flock cycle is 48 days (Agristats information) with 6 cycles per year

Annual N output = 0.0017 lb/day/bird $\times \frac{48 \text{ days}}{\text{Flock}}$ $\times \frac{6 \text{ flock}}{\text{year}}$

$$= 0.490 \text{ lb/year/bird}$$

of birds equivalent to 1000 AU

$$= \frac{113,150 \text{ lb N}}{0.490 \text{ lb/yr/bird}} = 230,918 \text{ birds}$$

B. P output: 0.34 lb/d/1000 lb

$$\begin{aligned} \text{P output/bird} &= 0.34 \text{ lb/day/1000 lb} \times \frac{1000 \text{ lb}}{400 \text{ birds}} \\ &= 0.00085 \text{ lb/day/bird} \end{aligned}$$

$$\text{Annual P output: } 0.00085 \text{ lb/day/bird} \times \frac{48 \text{ days}}{\text{flock}} \times \frac{6 \text{ flocks}}{\text{year}}$$

of birds equivalent to 1000 AU

$$\begin{aligned} &= \frac{40,150 \text{ lb/year}}{0.2448 \text{ lb/year/bird}} \\ &= 164,011 \end{aligned}$$

3. Determine equivalent number of layers

A. N output: 0.425 lb/day/1000 lb

$$\text{Avg. weight} = 4 \text{ lb}$$

$$\# \text{ of birds equivalent to 1000 lb} = 250$$

$$\begin{aligned} \text{N output/layer} &= 0.425 \text{ lb/day/1000 lb} \times \frac{1000 \text{ lb}}{250 \text{ birds}} \\ &= 0.0017 \text{ lb/day bird} \end{aligned}$$

Producers normally have 1 month/year for facility cleanout when birds not present, therefore, no nutrients are produced.

$$\begin{aligned} \text{Annual N output} &= 0.0017 \text{ lb/day/bird} \times \frac{335 \text{ days}}{\text{year}} \\ &= 0.569 \text{ lb/year/bird} \end{aligned}$$

of layers equivalent to 1000 AU

$$\begin{aligned} &= \frac{113,150 \text{ lb N}}{0.569 \text{ lb N/year/bird}} \\ &= 198,857 \text{ layers} \end{aligned}$$

B. P output: 0.275 lb/day/1000 lb

$$\text{P output layer} = 0.275 \text{ lb/day/1000 lb} \times \frac{1000 \text{ lb}}{250 \text{ birds}}$$

$$= 0.275 \text{ lb/day/1000 lb} \times \frac{1000 \text{ lb}}{250 \text{ birds}}$$

$$= 0.0011 \text{ lb/day/bird}$$

$$\text{Annual P output} = 0.0011 \text{ lb/day/bird} \times \frac{335 \text{ days}}{\text{year}} = 0.3685 \text{ lb/year/bird}$$

$$\# \text{ of layers equivalent to 1000 AU} = \frac{40,150 \text{ lb P}}{.3685 \text{ lb/year/bird}}$$

$$= 108,955 \text{ birds}$$

ATTACHMENT #14

Satisfaction with Relationship with Integrator

	Number of Respondents	Percent of Respondents
Very Satisfied	189	35.3
Somewhat Satisfied	237	44.2
Somewhat Dissatisfied	74	13.8
Very Dissatisfied	34	6.3
Don't Know	2	0.4
<i>Base</i>	<i>(536)</i>	

Source: Survey of Alabama Poultry Producers
Survey Research Lab
Center for Government Studies
Auburn University
Auburn, AL
March 1999

ATTACHMENT #15

Satisfaction with Income from Poultry Operation

	Number of Respondents	Percent of Respondents
Very Satisfied	75	14.0
Somewhat Satisfied	240	44.8
Somewhat Dissatisfied	117	21.8
Very Dissatisfied	99	18.5
Don't Know	5	.9
<i>Base</i>	<i>(536)</i>	

Source: Survey of Alabama Poultry Producers
Survey Research Lab
Center for Government Studies
Auburn University
Auburn, AL
March 1999