Animal Waste Management Plan

December 2004

Richter Ranch

Operated by:

Jess D. Richter
Richter Ranch
3417 Blanchet Avenue NE
St. Paul, Oregon 97137

Operation:

Broiler Chicken Facility
Large Federal CAFO

Approved
12/20/04

As owner and operator of **Jess D. Richter, Richter Ranch**, I intend to manage in accordance with the practices described in this Animal Waste Management Plan.

Signature Jess D Richter Date 12/17/04

MA#174681
AWMP#04191
Due date for plan review:
12/18/04

Oregon Department of Agriculture
ANIMAL WASTE MANAGEMENT PLAN

MINIMUM REQUIRED ELEMENTS

Producer name: Jess D. Richter dba Richter Ranch

Facility/Operation Location: 3417 Blanchet Avenue, NE
St. Paul, Oregon 97137

This guidance document is intended as a tool for producers and their plan preparers. It lists all of the minimum required elements of an AWMP. This guidance document is also available on ODA's website at http://www.oda.state.or.us/ord/cafo/CAFORIs.html.

1. Summary of CAFO Operation.

a) Contact name, address, phone number:

Jess D. Richter
Richter Ranch
3417 Blanchet Avenue NE
St. Paul, Oregon 97137
Telephone: (503) 633-2300

b) Facility address:

3417 Blanchet Avenue NE
St. Paul, Oregon 97137

c) Type of operation:

Poultry Farm (Broiler)

(i) Number and size of animals by species, expansion?

125,000 Chickens on the farm at one time during a grow period. The chickens grow to be approximately 5.25 lbs. Farm produces approximately 6.2 grows per year. There is no intended expansion in the future for this farm because of its size.

There are usually one to five horses in the horse barn at one time during the year. The horses average a weight of approximately 1,000 lbs., each.

d) Manure, litter and process waste system - provide a general narrative description of each:

(i) Collection - How is manure, litter and process waste removed from housing, confinement lots? How is clean water diverted from storage?

The chicken barns are totally cleaned out approximately two times per year between grows (when the chickens are in). Stutzman comes in with a loader and semi trailers and clean the flooring of the barns and load it into the semi-trailers and haul it away to their plant.

The water lines in each barn are lifted so that the loader can come in and clean out the barn floors. There is no water diversion problems or contamination by manure in this process.

Horse manure is cleaned out of the horse stalls into the chicken compost pile daily. This manure is stored in a pile to compost the chickens. Dead Chickens that are removed daily from the barns are composted in the horse manure pile. During the wet months of the year, the pile of manure is covered with a tarp. This manure is also hauled out by Stutzman at least twice a year.

(ii) Storage - Types and size of manure, litter and process waste storage tanks, ponds.

There are no manure, litter and process waste storage tanks or ponds on the property for the manure since it is hauled off of the farm. See Paragraph D(i) for removal of manure.

(iii) Transfer - How is manure, litter and process waste moved to storage, application areas?

Chicken Manure is removed from all barns by a loader that dumps the chicken manure from the barns into semi-trailers that immediately haul it off the farm. The horse manure is removed daily by cleaning out the stalls using

a Rubbermaid wheelbarrow and wheeling it to the compost pile. During a grow, the dead chickens removed from the barn daily are composted in the horse manure pile.

(iv) Use - How is manure, litter and process waste treated (composted, separated, anaerobic digestion or storage, aeration)? How is manure, litter and process waste water used on crops? If export is utilized, describe that process.

The chicken barns are totally cleaned out a few times per year between grows. Stutzman Farms comes in with a loader and semi trailers and clean the flooring of the barns and load it into the semi-trailers and haul it away to their plant for processing. The dead chickens that are taken out of the barns daily during the grow are composted in the horse manure pile. There is no manure, litter and process waste water used on any crop on the farm.

The barns are aired out between grows for approximately 5 days.

2. Specific description and calculations:

a) A narrative of production area and land application locations.

(i) Aerial photo or topographical map showing numbered field locations, production area facilities, clean water diversions, and surface water features.

See attached aerial photo map showing production facility as Exhibit A and topographical map showing production facility, clean water diversions and surface water features as Exhibit B.

(ii) Soil maps of all application fields, including those not owned, and map unit descriptions. Indicate areas with application limitations.

Do not have any soil maps of application fields in question.

b) Manure, litter and process waste volumes

(i) Manure (feces and urine), litter and process waste output that is collected and stored in this system.

There is no process waste output that is collected and stored on the property other than the horse manure/chicken compost pile. Stutzman Farms cleans out the barns twice a year and takes all of the manure. The horse manure and dead chicken compost pile is approximately 40 ft. long x 15 ft wide x 7 ft high. It is removed every year off of the farm. A compost pile is never in the same spot for more than two years.

(ii) Bedding added and collected.

Between each grow and/or after each manure cleanout of all of the barns, the barns are allowed to air out for approximately 5 days and then fresh sawdust and/or grass seed is laid on the floor of each barn by a slinger - hauled by a tractor, which shoots and spreads the fresh bedding (sawdust and/or grass seed all over the floors of the chicken barns as new bedding for the next grow).

(iii) Process and wash water collected, include footbath use when appropriate.

There is no process and wash water collection.

(iv) Silage and feed processing leachate.

Feed for the chickens are contained in silos at the front of each chicken barn. Semi trucks and trailers fill the silos with feed for the chickens. The silos then empty the feed electronically into the feed lines inside the barns which the chickens feed out of. There is no silage and feed processing leachate.

c. Contaminated storm water.

(i) Direct rainfall into storage.

There is no direct rainfall that enters the chicken barns. The storm water is carried from the roof gutters into ditches alongside the barns and then out through tiles underneath the ground to the highway road ditch.

(ii) Slab or lot runoff collected.

There is no slab or lot runoff.

(iii) Overflow from gutters or other diversions.

The ditches between the barns temporarily hold the overflow storm water if the ground is saturated from rain water and the overflow storm water will run out through tiles to the road ditch.

d. Nutrient content of manure, litter and process waste water.

(i) Content and volume of nutrients in manure, litter and process waste generated - can come from NRCS Animal Waste Field Handbook (Table 6.6 Oregon amendment), land grant university publications, or analysis of manure, litter and process waste. Actual test values required of large CAFOs.

The nutrient content of manure and litter generated is in the NRCS Animal Waste Field Handbook (Table 6.6 Oregon Amendment). There is no process waste water.

e. Farm nutrient balance.

(i) Show amount of nutrients (N, P, K) generated, lost in storage, lost during application, used by crops and/or exported off the farm on an annual basis.

There are no nutrients generated or lost from the ground in the barns during the chicken growing process. The litter that is used in the barns as flooring for the birds is the only thing removed, besides the dead birds that need to be picked up daily.

(ii) Nutrient application must balance to most limiting nutrient as determined by NRCS Agronomy Technical Note #26 and the NRCS Phosphorus Index.

N/A. There are no nutrient application balance issues of the soil on the farm.

(iii) Include all acres required to balance nutrients owned or leased by the operator.

N/A. There are no acres required to balance nutrients owned or leased by the operator.

f. Application schedule and limitations.

(i) Show scheduled applications of solids and liquids. Include date, amount and method of application to identified fields. Describe calibration of equipment used to apply manure, litter and process waste water.

The chickens are fed and watered by automated water lines and silos that feed the chickens through automated feed lines in the barns. There is no method of application to any of the floors of the chicken barns, except for a spray used between grows to kill beatles. There is no calibration of equipment used to apply manure, litter and process waste water.

(ii) Describe limitations to manure, litter and process waste applications. Indicate buffer areas and management to avoid frozen or saturated soils. Justify buffer width and management.

The horse manure/chicken compost pile is kept small and taken off of the farm yearly.

(iii) Using agronomic rates, application limitations, and scheduled applications, calculate the minimum storage required for liquids and solids.

The area where the compost pile is is approximately 45 ft. x 400 ft. The area that the compost pile takes up is only about 40 ft. long x 15 ft wide x 7 ft high.

(iv) How is irrigation water managed relative to manure, litter and process waste water application? Indicate general timing and application rates of irrigation water. Irrigation water management must not allow leaching of soluble nutrients or runoff.

There is no irrigation used in this farming operation.

g. Animal mortality management.

(i) Describe how the farm handles mortalities.

Dead chickens are picked up daily from each barn during the grow and composted in the horse manure compost pile.

3. Record keeping and reporting requirements.

a) Testing - monitoring.

(i) Include the protocol for testing manure, litter and process waste.

There is no testing of manure, litter and process waste. The manure is hauled off the farm by Stutzman Farms.

(ii) Include the protocol for testing and measuring crop nutrient removals.

N/A. There is no protocol for testing and measuring crop nutrient removals with respect to any crop grown. However, Foster Farms has a person that comes out and does their own monitoring of the chickens being grown.?

(iii) Include the protocol for soil testing to evaluate nutrient application and crop uptake?

N/A. There is no soil testing needed to evaluate nutrient application and crop uptake in this farming operation.

b. Record keeping. Include the following:

(i) Date and amount of manure, litter and process waste applied by field. Calculate N and P applied.

N/A. There is no manure, litter and process waste applied by field.

(ii) Manure, litter and process waste volume exported.

The manure, litter and process waste volume exported each year by Stutzman Farms is approximately 4,400 sq. cubic yards per year.

c. Reporting to Oregon Department of Agriculture.

(i) Any discharge within 24 hours.

(ii) Amount of manure, litter and process waste applied annually.

There is no manure, litter and process waste applied in this farming operation.

(iii) Amount of manure, litter and process waste exported annually.

Approximately 4,400 cubic sq. feet of manure from the barns is removed each year.

4. Additional requirements for Large CAFOs.

a) Inspection.

(i) Storm water diversions, runoff diversions, waste transport, storage structures, storage structure volume weekly.

(ii) Water lines daily.

(iii) Application equipment leaks periodically.

b) Record Keeping.

(i) Results of daily inspections.

(ii) Results of weekly inspections.

(iii) Results of periodic inspections.

(iv) Corrective actions taken, explain those not corrected.

(v) Expected crop yields if not in the plan.

The plan copy for the operator could include identified sections to store soil and manure, litter and process waste test reports, field application records, crop yield records, and other records related to the plan.

P.S. call me if I left anything out

Thank you

Jess D Griffin

Jess Richter dba Richter Ranch

ANIMAL INVENTORY

Type of Animal	Number of Animals	Average Weight (lbs.)	Animal Units (1,000 lb.)	Nutrient Production (lbs./day/1000 lb. Animal Unit) N	P	K	(lbs./day) N	P	K	Manure CF/D/AU	Annual Days Confined	Days Grazed
CHICKEN (BROILER)	125,000	3	312.5	1.10	0.34	0.46	343.75	106.25	143.75	1.26	280	85

BEDDING VOLUME

Type of Animal	Type of Bedding Facility	Bedding Material	Unit Weight Lbs/CF	Amount Needed Lbs/Day/AU	Volume CF/Day/AU	Total Volume CF/Day	Total Weight Lbs/Day
CHICKEN(BROILER)	Loose Housing	Sawdust	12.00	12.40	0.58	181	3,875

SOLIDS SEPARATION FACTOR

Type of Animal	Type of Separator	Separation Factor %	Volume of Solids Separated CF/Day	Volume of Solids in Liquids CF/Day	Volume of Manure in Liquids CF/Day	Volume of Manure in Solids CF/Day	Accumulated Sludge in Storage CF/Day	Density of Separated Solids Lbs/CF	Weight of Separated Solids Lbs/Day
CHICKEN (BROILER)	Dry Scrape	100%	575	0	0	394	0	36	20,700

MONTHLY VOLUMES

Month	Runoff in Cubic Feet: Roof Area Square Feet 0	Paved Slab Area Square Feet 0	Unpaved Lot Area Square Feet 0	Silage Pit Surface Area, SF 0	Facility Water Use Cubic Feet	Manure: Solids Cubic Feet	Manure: Liquids Cubic Feet	Bedding: Cubic Feet	Bedding: Pounds	Solids Separated: Cubic Feet	Solids Separated: Pounds	Solids in Liquids: Cubic Feet	Solids in Liquids: Pounds	Total Solids Cubic Feet	Total Liquids Cubic Feet
October	0	0	0	0	0	12,206	0	4,495	96,100	14,260	513,360	0	0	14,260	0
November	0	0	0	0	0	11,813	0	4,350	93,000	13,800	496,800	0	0	13,800	0
December	0	0	0	0	0	12,206	0	4,495	96,100	14,260	513,360	0	0	14,260	0
January	0	0	0	0	0	12,206	0	4,495	96,100	14,260	513,360	0	0	14,260	0
February	0	0	0	0	0	11,025	0	4,060	86,800	12,880	463,680	0	0	12,880	0
March	0	0	0	0	0	12,206	0	4,495	96,100	14,260	513,360	0	0	14,260	0
April	0	0	0	0	0	11,813	0	4,350	93,000	13,800	496,800	0	0	13,800	0
May	0	0	0	0	0	12,206	0	4,495	4,495	14,260	513,360	0	0	14,260	0
June	0	0	0	0	0	11,813	0	3,806	81,375	12,075	434,700	0	0	12,075	0
July	0	0	0	0	0	12,206	0	3,933	84,088	12,478	449,190	0	0	12,478	0
August	0	0	0	0	0	12,206	0	3,933	84,088	12,478	449,190	0	0	12,478	0
September	0	0	0	0	0	11,813	0	3,806	81,375	12,075	434,700	0	0	12,075	0
Annual	0	0	0	0	0	143,719	0	50,714	992,620	160,885	5,791,860	0	0	160,885	0

The volumes shown above are for raw manure and bedding.
Volume is reduced significatly during the storage and composting process.
Monthly volumes will fluctuate depending on confinement dates.

100% of the manure is taken directly out of the barns, into trucks, and hauled off the farm

ANIMAL WASTE MANAGEMENT PLAN
MINIMUM REQUIRED ELEMENT

ADDITIONAL REQUIREMENTS FOR LARGE FEDERAL CAFOs

Richter Ranch - Jess Richter
NAME OF OPERATION

	FREQUENCY OF INSPECTIONS	ITEM(S) TO BE INSPECTED
A) INSPECTIONS:	DAILY	• Water lines
	WEEKLY	• Storm water diversions • Run-off diversions • Waste transport • Storage structures • Storage structure volume
	PERIODIC	• Application equipment leaks

B) RECORD KEEPING:

Record results of:

1) Daily inspections.
2) Weekly inspections.
3) Periodic inspections.
4) Corrective actions taken, explain those not corrected.
5) Expected crop yields (if not in the plan).
6) Weather conditions at the time of manure, litter or process water application and 24 hours before and after application.
7) Total amount of manure or wastewater transferred to other persons, including date and amount of each transfer and the name and address of each recipient.

C) OPERATION REQUIREMENTS:

1) Must have depth markers in all surface liquid impoundments (i.e. lagoons, ponds, tanks). Markers must indicate:
   a. Maximum design volume.
   b. Minimum capacity necessary to contain 25-year, 24 hours rainfall event.
   c. Depth of manure and process wastewater.
2) Maintain setback area within 100 feet of any down gradient surface water, open tile line intake structure, sinkholes, agricultural wellheads, or other conduits to surface waters where manure, litter, and other process wastewaters are prohibited. As a compliance alternative, and if demonstrated to the satisfaction of ODA, the permittee may:

ANIMAL WASTE MANAGEMENT PLAN
MINIMUM REQUIRED ELEMENT

OPERATION AND MAINTANENCE

Jess D Richter
Name of Operation

Mark all that apply to your operation.

☐ Above and/or Below Ground Liquid Tank

The tank serves as a collection point for effluent to drain to or be scraped from the animal feeding areas. If the tank will provide storage capacity to the waste management system it shall be completely emptied at the beginning of the storage period and the contents applied to cropland as weather and crop conditions permit. A 1-foot free board will be maintained to prevent spillage. Continually maintain all pumps, agitators, piping valves and all other electrical and mechanical equipment in good operating condition by following manufacturer's recommendations. Float valves will be maintained in good working order. Perform daily inspections of waterlines including drinking water or cooling water lines. Repair leaking lines immediately to prevent excess water from entering the waste storage system. Depth markers are installed to assure maximum volume will be maintained and checked weekly. At least once every 5 years, the tank shall be emptied and inspected for structural damage and leakage. Any damage found shall be corrected before putting the tank back in service. Remove all foreign debris within the structure that may cause damage to pumps and agitator. If below ground, the tank lid will not be subjected to more than two, 8,000 pound wheel loads. Before entering a tank, for any reason whatever, proper ventilation shall be provided, and self-contained breathing apparatus shall be used, if required, when entering a covered tank. No one shall enter the tank unless safety ropes are used and someone else capable of providing assistance is outside of the tank. Warning: Entering Unventilated Tanks Is Extremely Dangerous.

☐ Animal Access Lanes or Walkways

Damaged components will be repaired or replaced as needed. Debris and excess manure will be removed from roadway surfaces, road ditch and drainage areas. Maintain drainage area capacities. Maintain good vegetative cover on all slopes and watercourses.

☐ Agitator

Preventative maintenance will be in accordance with the manufacturer's recommendations. Periodically examine the agitator for proper operation. Clean debris from the propeller and promptly replace any defective or damaged parts. Remove the agitator from the manure tank or pond and periodically clean and oil as needed to increase the life expectancy of the agitator. Immediately repair any vandalism or livestock damage. Do not allow livestock near the equipment during operation.

☐ Irrigation Water Management

Irrigation water application will be at rates that minimize transport of sediment, nutrients, and chemicals to surface water and ground water. Equipment modifications and/or soil amendments such as polyacrylamides and mulches should be considered to reduce erosion if needed.

☐ Manure Application Equipment

All manure application equipment (including but not limited to sprinklers, big gun irrigators, spreaders and/or tank wagons) will be operated and maintained according to the manufacturer's manual. Equipment found to be broken or worn will be replaced. Equipment will be calibrated to ensure recommended rates are applied. Liquids will be drained from sprinklers or big guns prior to freezing weather. When system is flushed, rinse water is used following waste, and liquid and sediment is applied agronomically. Nozzles will be checked periodically and if worn, nozzles will be replaced. Minimize exposure to animal and organic waters and manure gasses. Wear protective clothing when appropriate. When cleaning equipment after nutrient application, remove and save wastes in an appropriate manner. Avoid applying manure near surface water by establishing buffer strips and set backs, and use extreme care to avoid contaminating ground water.

☐ Manure Effluent and Irrigation Transfer Lines.

Manure, effluent and irrigation lines shall be flushed with clean water periodically to prevent particle buildup and plugging. Manure flushed from the lines will be applied agronomically so that surface and groundwater will be protected. Manure, effluent and irrigation lines shall be inspected periodically for leaks or worn out nozzles, and repairs or replacements made as needed. Special inspection shall be done to pressure relief valves, risers and control valves. Shut off valves will be inspected annually. Avoid unnecessary travel over pipelines that will damage their integrity. Equipment found to be broken or worn will be replaced. Water will be drained during cold weather to prevent frozen or broken lines. These lines can explode if not properly maintained and may cause human injury.

☐ Pumps

Pumps will be maintained in accordance with manufacturer's operation and maintenance manual. Effluent will be drained from pumps prior to freezing weather. Pumps will be inspected periodically to identify and remove debris wrapped around impeller or worn parts. Appropriate action will be taken to repair any worn parts. Liquids will be drained from pump prior to freezing weather to prevent breakage. It is recommended to have a spare pump or back up system in case a pump must be removed for an extended time for repair.

☑ Roofs

Roofs will be inspected annually. Rusted sections will be replaced or repaired if needed. Loose sections will be secured. All broken trusses, beams, poles, gutters and downspouts will be repaired or replaced.

☐ Solid Manure Separator

The separator should be inspected regularly for deterioration of protective coatings and repaired as necessary. All plumbing will be inspected annually and broken lines will be replaced or repaired. Loose connections will be tightened. If applicable, electric motors, pumps and gears should be routinely maintained. Separator will be operated and maintained according to manufacturer's manual.

APPENDIX E - ANIMAL WASTE SAMPLING

Animal waste analysis is a key component of nutrient management. Complete analyses provide critical information about the animal waste composition, including pH and nutrient content. Actual nutrient content of animal waste varies with the type of animal, feed, storage system, and method of animal waste application. You should sample animal waste stored on site each time it is to be removed (for land application on or off site). Sample daily spread operations (if you land-apply daily) several times throughout the year to obtain a good estimate of nutrient content.

Description

Animal waste sampling is relatively simple, but must be done properly for reliable results. The sampling method differs based on the type of animal waste you generate at your farm (e.g., liquid, semi-solid, solid). Animal waste sampling generally consists of two to seven steps, depending on the type of animal waste. Although the number of steps varies based on the physical state of the animal waste, all of the methods rely on collecting a representative animal waste sample for analysis. Where bedding is collected with the animal waste, include both bedding and animal waste in the sample. Also, conduct sampling as close to the time of land application as possible. Specific techniques for gathering poultry litter, liquid animal waste, semi-solid animal waste, and solid animal waste samples are described below; you can use these to help develop sampling procedures at your farm. Remember that you should sample and analyze all animal waste at your farm. Work with your state and local agricultural Cooperative Extension Offices to ensure that you develop the proper procedures for your conditions and animal waste management methods.

Before sampling, know where the samples are to be shipped, how to pack and ship the sample, and what to use as sample containers. Many laboratories will furnish the proper sample containers for a small charge. Samples should never be collected and shipped in glass bottles, and they should be shipped on wet ice unless otherwise instructed by the laboratory. Contact your state or local agricultural Cooperative Extension Office for a list of laboratories that can perform your analyses. You should also wear gloves at all times, to protect yourself and the sample from contamination.

The test should analyze for such parameters as percentage of dry matter, ammonium-nitrogen, total-nitrogen, phosphorus (P or P_2O_5), and potassium (K or K_2O). Request results in the same units as your calibrated animal waste application system (see Appendix J for more information about calibrating animal waste spreaders and irrigators). For example, if your animal waste application is measured in tons per acre, request that your analysis be reported as pounds of nutrient per ton of animal waste.

Instructions for Collecting Poultry Litter Samples

Poultry litter is a mixture of poultry animal waste and the bedding (e.g., sawdust or rice hull) from houses used to raise broilers, turkeys, and other birds. You will need a clean 5-gallon bucket, a narrow, square-ended spade (or a soil spade), and a 1-quart plastic freezer bag to collect and store your sample. The five steps to collecting a representative poultry litter sample are described below.

Instructions for Collecting Semi-Solid Animal Waste Samples

Collecting a representative sample of semi-solid animal waste is best done using a simple sampling device. You will need a 2-inch PVC pipe, nylon rope, a rubber ball, a dowel, a clean 5-gallon bucket, and sample containers. The seven steps to collecting a representative semi-solid animal waste sample are described below.

Step 1: Get a length of 2-inch PVC pipe long enough to reach well into your animal waste storage facility. Cut a notch 2 inches long and 1/4 inch wide at one end of the pipe. Cut a length of nylon rope 2 feet longer than the PVC pipe and tie a knot at one end. Drill a hole through a 2.5 inch rubber ball. Thread the rope through the ball until it is snug against the end knot. Tie a second knot to hold the ball at the end of the rope. Thread the rope through the PVC pipe and pull it until the ball plugs the end of the pipe. Slip your end of the rope into the notch and tie a knot; this will create a "latch" to keep the pipe sealed after you collect the sample. Tie a short dowel to the free end of the rope to serve as a hand grip. Cut a length of 1-inch PVC pipe and seal one end. Use this pipe to push samples out of the tube.

Step 2: With the ball sealing the end of the pipe, push the pipe through the top layer of animal waste to form a sample hole.

Step 3: Release the rope from the notch so that the ball dangles freely from the end of the pipe. Push the pipe into the sample hole in the animal waste crust. Make sure the ball does not block the pipe opening.

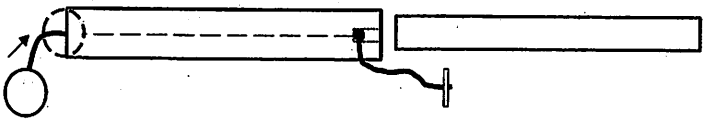
Step 4: Ease the pipe back slightly and pull the rope until the ball seals the end of the pipe. Slip the rope in the notch to anchor the ball in place and withdraw the pipe.

Step 5: Pour the sample into a clean 5-gallon bucket. You may need the 1-inch PVC pipe to force the sample from the pipe. Two people will need to operate a long pipe. To avoid backwash, keep the bottom of the pipe lower than your end.

Step 6: Repeat this process at several locations around the pit.

Step 7: Mix samples thoroughly in the bucket, then fill your sample container with the mix, leaving 2 inches of air space. Tightly seal the container and keep the sample cool (on ice if possible) until it is shipped.

A diagram of the sampling apparatus is shown below.



Sample Apparatus for Semi-Solid Animal Waste

Instructions for Collecting Solid Animal waste

Collecting a representative sample of solid animal waste is best done using a simple sampling device. You will need thin-walled metal tubing (1-inch diameter), a drill, a dowel or short metal rod, a clean 5-gallon bucket, and sample containers. The four steps to collecting a representative solid animal waste sample are described below.

Step 1: Cut a 3-foot length of thin-walled metal tubing and sharpen the bottom edge. Near one end, drill

References

MU Extension, University of Missouri-Columbia. Sampling Poultry Litter for Nutrient Testing.

Cooperative Extension Service, University of Maryland System. Manure Analysis Instruction Sheets.

Who to Contact For More Information

Your Local Cooperative Cooperative Extension Office
Your Local Land Grant University
National Water Management Center/Natural Resources Conservation Service (USDA)


Aequalis photography
4-2-97

2010 AMENDMENT TO THE OREGON DEPARTMENT OF AGRICULTURE ANIMAL WASTE MANAGEMENT PLAN FOR RICHTER RANCH, INC. (Originally Approved on December 20, 2004)

MINIMUM REQUIRED ELEMENTS

Producer Name: Richter Ranch, Inc.

Facility/Operation Location: 3417 Blanchet Avenue NE
St. Paul, OR 97137

This guidance document is intended as a tool for producers and their plan preparers. It lists all of the minimum required elements of an AWMP. This guidance document is also available on ODA's website at http://www.oda.or.us/ord/cafo/CAFORIs.html.

1. Summary of CAFO Operation.

a) Contact name, address, phone number:

Richter Ranch, Inc.
Attn: Caroline Richter, President
3417 Blanchet Avenue NE
St. Paul, OR 97137
Telephone: 503-550-2023

b) Facility address:

3417 Blanchet Avenue NE
St. Paul, OR 97137

c) Type of operation:

Poultry Broiler Farm

(i) Number and size of animals by species, expansion?

This operation raises no more than 125,000 chickens on the farm at any one time during a grow period. The chickens grow to approximately 5.50 to 6 lbs. The farm produces approximately six grows per year. There is no intended expansion in the future for this farm because of its size. There is usually one to five horses on the farm at one time during the year. The

horses average a weight of approximately 1,000 lbs. each. There are one to five goats on the farm. The goats weigh anywhere from five to 75 lbs.

d) Manure, litter and process waste system - provide a general narrative description of each:

(i) Collection - How is manure, litter and process waste removed from housing, confinement lots? How is clean water diverted from storage?

The farm uses a Lewis Poultry Housekeeper to skim the top layers of poultry litter off the barn floors between each grow. New sawdust is then laid as new bedding for the next grow. The litter skimmings are stored in the manure barn.

Each year the farm has a "total cleanout" of all of the poultry barns two times per year between grows (when the chickens are out). We use Stutzman Farms to clean out the poultry barns. They use loaders and load the litter onto semi trailers and immediately haul the litter to their facility in Canby, Oregon.

For each type of cleanout above, the water and feed lines are raised in each barn so that the Lewis Poultry Housekeeper and/or loaders can come in and clean out the barn floors. There is no water diversion problems or contamination by manure in this process.

The small amount of horse and goat manure is cleaned out of the stalls in the horse barn and put in the manure barn by wheelbarrow. The manure barn has a roof, three sides and cement floor. This barn has enough storage room to store all of the manure until Stutzman Farms comes in and cleans out the barns semi-annually. At this time they also take all of the manure in the manure barn.

Our farm does not have an outdoor compost pile anymore to compost dead chickens. The dead chickens are now picked up and put in the rented dumpster on a daily basis during the grow.

(ii) Use - How is manure, litter and process waste treated (composted, separated, anaerobic digestion or storage, aeration)? How is manure, litter and process waste water used on crops? If export is utilized, describe that process.

We have a total cleanout of our poultry barns twice a year by Stutzman Farms. Stutzman Farms comes in with their loaders and semi-trailers and clean the flooring of the barns and load into semi-trailers and haul the manure to their facility in Canby, Oregon. The dead chickens that are

taken out of the poultry barns daily are put in the rented dumpster. There is no manure, litter and process waste water used on any crop on the farm.

The poultry barns are aired out between grows for approximately 5 days.

2. Specific description and calculations:

a) A narrative of production area and land application locations.

(i) Aerial photo or topographical map showing numbered field locations, production area facilities, clean water diversions, and surface water features.

See attached aerial photo map showing production facility as Exhibit A and topographical map showing production facility, clean water and diversions and surface water features as Exhibit B.

(ii) Soil maps of all application fields, including those not owned, and map unit descriptions. Indicate areas with application limitations.

Do not have any soil maps of application fields in question.

b) Manure, litter and process waste volumes

(i) Manure (feces and urine), litter and process waste output that is collected and stored in this system.

There is no process waste output that is collected and stored on the property other than inside the manure barn. Stutzman Farms cleans out the poultry barns twice a year and takes all of the manure, as well as the manure in the manure barn. The horse and goat manure is stored in the manure barn. The manure barn is approximately 60x60x14 ft. high.

The manure from the manure barn is removed twice a year when Stutzman Farms also cleans out the poultry barns. The litter skimmed from the poultry barns between grows is also stored in the manure barn.

(ii) Bedding added and collected.

Between each grow and/or after each total manure cleanout of all of the poultry barns, the barns are allowed to air out for approximately five days and then fresh sawdust is laid on the floor of each poultry barn by a sawdust spreader, hauled by our tractor which shoots and spreads the fresh sawdust over the floors of the poultry barns as new bedding for the next grow.

(iii) Process and wash water collected, include footbath use when appropriate.

There is no process and wash water collection.

(iv) Silage and feed processing leachate.

Feed for the chickens are contained in silos at the front of each poultry barn. Foster Farm feed trucks fill the silos with feed for the chickens. The silos then empty the feed electronically into the feed lines inside the barns which the chickens feed out of. There is no silage and feed processing leachate.

c. Contaminated storm water.

(i) Direct rainfall into storage.

There is no direct rainfall that enters the chicken barns. The storm water is carried from the drainage ditches alongside the barns and then out through tiles underneath the ground to the highway road ditch. The new improved drainage system was installed in 2008.

(ii) Slab or lot runoff collected.

There is no slab or lot runoff.

(iii) Overflow from gutters or other diversions.

If the ground is saturated with water, the new drainage system installed in 2008 runs the overflow storm water out through the new drainage system to the road ditch.

d. Nutrient content of manure, litter and process waste water.

(i) Content and volume of nutrients in manure, litter and process waste generated - can come from ANRCS Animal Waste Field Handbook (Table 6.6 Oregon amendment), land grant university publications, or analysis of manure, litter and process waste. Actual test values required of large CAFOs.

The nutrient content of manure and litter generated is in the NRCS Animal Waste Field Handbook (Table 6.6 Oregon Amendment). There is no process waste water.

e. Farm nutrient balance.

(i) Show amount of nutrients (N, P, K) generated, lost in storage, lost during application, used by crops and/or exported off the farm on an annual basis.

There are no nutrients generated or lost from the ground in the poultry barns during the chicken growing process. The litter that is in the barns as flooring for the birds is the only thing removed, besides the dead birds that are picked up daily.

(ii) Nutrient application must balance to most limiting nutrient as determined by NRCS Agronomy Technical Note #26 and the NRCS Phosphorus Index.

N/A. There are no nutrient application balance issues of the soil on the farm.

(iii) Include all acres required to balance nutrients owned or leased by the operator.

N/A. There are no acres required to balance nutrients owned or leased by the operator.

f. Application schedule and limitations.

(i) Show scheduled applications of solids and liquids. Include date, amount and method of application to identified fields. Describe calibration of equipment used to apply manure, litter and process waste water.

N/A. There is no application of solids or liquids on the farm.

(ii) Describe limitations to manure, litter and process waste applications. Indicate buffer areas and management to avoid frozen or saturated soils. Justify buffer width and management.

N/A. There is no process waste application on the farm.

(iii) Using agronomic rates, application limitations, and scheduled applications, calculate the minimum storage required for liquids and solids.

The area where the manure is kept between cleanouts twice a year is the manure barn. The manure barn is 60x60x14ft high with a cement floor and three sides.

(iv) How is irrigation water managed relative to manure, litter and process waste water application? Indicate general timing and application rates of irrigation water. Irrigation water management must not allow leaching of soluble nutrients or runoff.

There is no irrigation used in this farming operation.

g. Animal mortality management.

(i) Describe how the farm handles mortalities.

Dead chickens are picked up daily from each poultry barn and put in the rented dumpster. The dumpster is taken away at the end of the grow and a new dumpster is put in place for the next grow.

3. Record keeping and reporting requirements.

a) Testing - monitoring.

(i) Include the protocol for testing manure, litter and process waste.

Once a year 10-15 small samples from different areas of the manure pile inside the manure barn are put in a bucket and mixed. The sample is then put in a secure bag and immediately shipped to Agri-Check who tests the sample and sends us a report on the litter. The test result is mailed to the Oregon Department of Agriculture on receipt of the test results.

(ii) Include the protocol for testing and measuring crop nutrient removals.

N/A.

(iii) Include the protocol for soil testing to evaluate nutrient application and crop uptake?

N/A. There is no soil testing needed to evaluate nutrient application and crop uptake in this farming operation.

b) Record keeping. Include the following:

(i) Date and amount of manure, litter and process waste applied by field. Calculate N and P applied.

N/A. there is no manure, litter and process waste applied by field.

(ii) Manure, litter and process waste volume exported.

The chicken litter and small amount of manure exported each year by Stutzman Farms is approximately 1,000 to 1,500 tons per year.

c. Reporting to Oregon Department of Agriculture.

(i) Any discharge within 24 hours.

None.

(ii) Amount of manure, litter and process waste applied annually.

There is no manure, litter and process waste applied in this farming operation.

(iii) Amount of manure, litter and process waste exported annually.

Approximately 1,000 to 1,500 tons of chicken litter, including horse manure from 1 to 5 horses and 1 to 5 goats is removed each year.

4. Additional requirements for Large CAFOs.

a) Inspection.

(i) Storm water diversions, runoff diversions, waste transport, storage structures, storage structure volume weekly.

(ii) Water lines daily.

(iii) Application equipment leaks periodically.

b) Record Keeping.

(i) Results of daily inspections.

(ii) Results of weekly inspections.

(iii) Results of periodic inspections.

(iv) Corrective actions taken, explain those not corrected.

(v) Expected crop yields if not in the plan.

The plan copy for the operator could include identified sections to store soil and manure, litter and process waste test reports, field application records, crop yield records, and other records related to the plan.