Poultry Farm Waste Management Odor Control Checklist

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Farmstead	 Poultry production 	☐ Vegetative or wooded buffers	
		☐ Recommended best management practices	
		☐ Good judgment and common sense	
Floor surfaces (walk aisles)	Wet dirty surfaces	☐ Scrape manure, dust, feathers into collection alleys	
		☐ Splash boards along upper ends of collection alleys	
		☐ Proper ventilation	
Cage manure dropping boards	Manure-covered surfaces	☐ Scrape manure into collection alleys	
Manure collection alleys	Partial microbial	☐ Frequent manure removal by flush or scrape	
	decomposition	☐ Frequent checks and maintenance on waterers	
		and water pipes	
Ventilation exhaust	 Volatile gases 	☐ Fan maintenance	
fans	• Dust	☐ Efficient air movement	
Indoor surfaces	• Dust	☐ Vacuum or washdown between flocks	
Manure conveyors	 Partial microbial 	☐ Keep mechanical equipment in good repair	
	decomposition	☐ Remove manure accumulations promptly	
Storage tank or	 Partial microbial 	☐ Bottom or midlevel loading	
basin surface	decomposition	☐ Tank covers	
	 Mixing while filling 	Basin surface mats of solids Proven high gired additives or evidents	
	• Agitation when emptying	☐ Proven biological additives or oxidants	
Manure slurry or	Agitation when spreading	☐ Soil injection of slurry/sludges	
sludge spreader outlets	 Volatile gas emissions 	☐ Wash residual manure from spreader after use	
	S	☐ Proven biological additives or oxidants	
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Uncovered manure	• Volatile gas emissions while	☐ Soil injection of slurry/sludges	
slurry or sludge on	drying	☐ Soil incorporation within 48 hours	
field surfaces			
Outside drain	 Agitation during wastewater 	☐ Box covers	
collection or junction	conveyance		
boxes Lift stations	Agitation during sump tank	☐ Sump tank covers	
Ziit stations	filling and drawdown		
End of drainpipes at	Agitation during wastewater	☐ Extend discharge point of pipes underneath	
lagoon	conveyance	lagoon liquid level	
Lagoon surfaces	 Volatile gas emissions 	☐ Proper lagoon liquid capacity	
	 Biological mixing 	☐ Correct lagoon startup procedures	
	• Agitation	☐ Minimum surface area-to-volume ratio	
		☐ Minimum agitation while pumping	
		☐ Mechanical aeration	
		☐ Proven biological additives	
Irrigation sprinkler	High pressure agitation	☐ Irrigate on dry days with little or no wind	
nozzles	• Wind drift	☐ Minimum recommended operating procedure	
		☐ Pump intake near lagoon liquid surface	
		☐ Pump from second-stage lagoon	

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Dead birds	 Carcass decomposition 	☐ Proper disposition of carcasses	
Dead bird disposal pits	Carcass decomposition	☐ Complete covering of carcasses in burial pits	
		☐ Proper location/construction of disposal pits	
		☐ Disposal pit covers tight fitting	
Standing water around facilities	Improper drainage	☐ Grade and landscape such that water drains away from facilities	
	 Microbial decomposition of organic matter 		
Mud tracked onto public roads from farm access	 Poorly maintained access roads 	☐ Farm access road maintenance	

Additional Information:	Available From:
Poultry Manure Management; .0200 Rule/BMP Packet	NCSU, County Extension Center
Poultry Layer Production Facility Manure Management: High Rise, Deep Pit; EBAE 131-88	NCSU—BAE
Poultry Layer Production Facility Manure Management: Undercage Flush—Lagoon Treatment; EBAE 130-88	NCSU—BAE
Lagoon Design and Management for Livestock Manure Treatment and Storage; EBAE 103-83	NCSU—BAE
Calibration of Manure and Wastewater Application Equipment; EBAE Fact Sheet	NCSU—BAE
Proper Disposal of Dead Poultry; PS&T Guide No. 19	NCSU—Poultry Science
Nuisance Concerns in Animal Manure Management: Odors and Flies; PRO107, 1995 Conference Proceedings	Florida Cooperative Extension