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 decomposition	❒ Frequent manure removal by flush or scrape ❒ Frequent checks and maintenance on waterers and water pipes	
Ventilation exhaust fans	• Volatile gases • Dust	❒ Fan maintenance ❒ Efficient air movement	
Indoor surfaces	• Dust	❒ Vacuum or washdown between flocks	
Manure conveyors	• Partial microbial decomposition	❒ Keep mechanical equipment in good repair ❒ Remove manure accumulations promptly	
Storage tank or basin surface	• Partial microbial decomposition • Mixing while filling • Agitation when emptying	❒ Bottom or midlevel loading ❒ Tank covers ❒ Basin surface mats of solids ❒ Proven biological additives or oxidants	
Manure slurry or sludge spreader outlets	• Agitation when spreading • Volatile gas emissions	❒ Soil injection of slurry/sludges ❒ Wash residual manure from spreader after use ❒ Proven biological additives or oxidants	

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Uncovered manure slurry or sludge on field surfaces	• Volatile gas emissions while drying	❒ Soil injection of slurry/sludges ❒ Soil incorporation within 48 hours	
Outside drain collection or junction boxes	• Agitation during wastewater conveyance	❒ Box covers	
Lift stations	• Agitation during sump tank filling and drawdown	❒ Sump tank covers	
End of drainpipes at lagoon	• Agitation during wastewater conveyance	❒ Extend discharge point of pipes underneath lagoon liquid level	
Lagoon surfaces	• Volatile gas emissions • Biological mixing • Agitation	❒ Proper lagoon liquid capacity ❒ Correct lagoon startup procedures ❒ Minimum surface area-to-volume ratio ❒ Minimum agitation while pumping ❒ Mechanical aeration ❒ Proven biological additives	
Irrigation sprinkler nozzles	• High pressure agitation • Wind drift	❒ Irrigate on dry days with little or no wind ❒ 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 • Microbial decomposition of organic matter	❒ Grade and landscape such that water drains away from facilities	
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