

Materials List for:

Lab-Scale Model to Evaluate Odor and Gas Concentrations Emitted by Deep Bedded Pack Manure

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Materials

Name	Company	Catalog Number	Comments
10 gallon plastic cylinder containers	Rubbermaid	Model 2610	Other similar-sized plastic containers are suitable
Mass balance	Any		Capable of measuring 0.1 gram
Electric drill with 1 cm bit	Any		
Methane analyzer	Thermo Fisher Scientific	Model 55i Methane/Non-methane Analyzer	
Hydrogen sulfide analyzer	Thermo Fisher Scientific	Model 450i	
Ammonia analyzer	Thermo Fisher Scientific	Model 17i	
Carbon dioxide analyzer	California Analytical	Model 1412	
Nitrous oxide analyzer	California Analytical	Model 1412	
Programmable Logic Relay	TECO	Model SG2-020VR-D	
Stainless steel flux chambers	Any		Constructed using the parts list and directions cited at Woodbury et al., 2006
Rubber skits	Any		Constructed from flexible rubber material. Cut into squares (61 cm x 61 cm) with 22.9 cm diameter hole in center.
pH meter	Spectrum Technologies	IQ150	
thermometer	Spectrum Technologies	IQ150	
Ruler or tape measure	Any		Capable of measuring in cm
Sorbent tubes	Markes International	Tenax TA	
Pocket pumps	SKC Inc.	Series 210	
Inert sampling line	Teflon		0.64 cm diameter
Pump	Thomas	107 series	Used to flush air through sample lines