



Electronic Newsletter

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The variation in temperature starting late fall and progressing into the winter months requires strategies dealing with ventilating pig barns in our cold climate regions. Ventilation deals with bringing in fresh air to meet heating and cooling requirements.

Part of maintaining a good environment in the barn is to ensure that ventilation controllers are set to ensure proper ventilation rates required to remove moisture, gas and other contaminants from the air space inside the barn. Ventilation rate is also a component of the set point temperature and insulation factor of the building itself. A balance needs to be found between the removal of contaminants and moisture, while maintaining a room temperature close to the set point ensuring minimal loss of heat expelled to the outside.

Attached is a Heating and Ventilation Checklist created by Prairie Swine Centre to help hog producers with the challenges of heating and ventilating the barn. For more information go to www.prairieswine.com

Heating and Ventilation System Monitoring and Maintenance Checklist



2010

Name of person responsible: _____ Name of barn: _____			Winter (before Nov 15)	Summer (before June 1)	Action required (if any)	Date required action complete d	Complete d by:
Heating	Heater furnace	Cleaned:	Yes / No	Yes / No			
		Main shut-off valve:	Opened	Yes / No			
			Shut off		Yes / No		
		Variable output valve: (if equipped)	Set to Low	Yes / No			
			Set to High	Yes / No			
		Pilot light:	Lighted	Yes / No			
	Shut off			Yes / No			
	Controller	Checked:	Temperature set-points	Yes / No	Yes / No		
			Settings of fan stages	Yes / No	Yes / No		
			Variable-speed fan bandwidth (not less than 1 °C)	Yes / No	Yes / No		
			Heater offset (1-1.5 °C below room set-point)	Yes / No			
	Sensors (temperature, humidity if equipped)	Cleaned:		Yes / No	Yes / No		
		Calibrated:	(against standard)	Yes / No	Yes / No		
	Fans	Cleaned:	Blades	Yes / No	Yes / No		
			Shutters	Yes / No	Yes / No		
Discharge cones			Yes / No	Yes / No			
Ventilation	Checked:	Fan rotation (direction of air flow)	Yes / No	Yes / No			
		Belt tension	Yes / No	Yes / No			
		Motors, housing, blades (i.e., damages)	Yes / No	Yes / No			
		Electrical wires, plugs/sockets	Yes / No	Yes / No			
	Inlets	Cleaned:	Not blocked with dirt or frozen shut	Yes / No	Yes / No		
		Checked:	Uniform opening/closing of all inlets	Yes / No	Yes / No		
			Opening size range at least 4 inches	Yes / No	Yes / No		
	Actuators functioning properly		Yes / No	Yes / No			
	Air intake (soffits/eaves screen/side wall)	Cleaned:	Not blocked with dirt or ice build-up	Yes / No	Yes / No		
		Checked:	Proper slot opening size	Yes / No	Yes / No		
	Air leaks Checked and sealed (if any):	Checked and sealed (if any):	Doors and external openings	Yes / No			
			Fan housing	Yes / No			
			Feeder/auger lines	Yes / No			
		Fan covers:	Installed	Yes / No			
	Removed			Yes / No			
	Insulation	Checked:	Attic	Yes / No	Yes / No		
			Hot water tank/pipes	Yes / No	Yes / No		
			Walls	Yes / No	Yes / No		
Emergency and alarm system	Checked:	Back-up power operation	Yes / No	Yes / No			
		Emergency thermostat settings	Yes / No	Yes / No			
		Alarm functions	Yes / No	Yes / No			

