

# **EXHIBIT I**

## **MANURE APPLICATION SETBACKS**

## MINIMUM STATE REQUIREMENTS FOR MANURE APPLICATION IN SENSITIVE AREAS

Sensitive Areas	Winter Setbacks	Non-Winter Setbacks			Other Requirements
		A: Surface Application	B: Incorp. + P mgmt	C: Incorp. NO P mgmt	
Streams/inter. streams	300'	*300'	25'	*300'	
Lakes and wetlands	300'	*300'	25'	*300'	
Drainage ditches	300'	*300'	25'	*300'	
Open tile intakes	**300'	**300'	0'	0'	
Steeply sloping land	—	—	—	—	Permit may be needed
Road ditches	—	—	—	—	No application into ditch
Frequently flooded soils	—	—	—	—	Consider in mgmt. plan
High phosphorus soils	—	—	—	—	Permit may be needed No P build-up at some sites
High water table soils	—	—	—	—	Consider in mgmt. plan
Wells/wellhead protection	50'	50'	50'	50'	Permit may be needed
Sinkholes (without berms or diversions)	50' down 300' up	50' down 300' up	50'	50'	
Coarse-textured soils	—	—	—	—	Consider in mgmt. plan
Shallow soils over bedrock	—	—	—	—	Consider in mgmt. plan
Mines and quarries	50'	50'	50'	50'	

**A** = Surface application with NO incorporation within 24 hours

**B** = Injection or incorporation within 24 hours AND phosphorus management\*\*\*

**C** = Injection or incorporation within 24 hours with NO phosphorus management\*\*\*

— = No specific requirements.

\*Setbacks can be reduced from 300' to either 100' (lakes and perennial streams) or 50' (wetlands, drainage ditches, and intermittent streams) if permanent vegetative buffers that are at least 100 and 50 feet wide are planted along the waters.

\*\*The 300' open tile intake setback for non-incorporated surface application of **solid manure** is exempted until 2005.

\*\*\*Phosphorus management means that the application rate and frequency over six-year periods will not result in soil P build-up where soil P already exceeds 21 ppm Bray P1 or 16 ppm Olsen.