Practices for successful fall livestock manure application

For livestock producers and commercial applicators, the completion of the crop harvest leads to the fall manure land application season. Observe these practices for a successful campaign to get the most value from manure, and protect surface water:

1) Check manure hauling equipment; weather forecast.

- A. Check manure hauling equipment for broken hoses, loose connections, leaking valves, and gaskets.
- B. Listen to the weather forecast; refrain from applying if rain is on the way.



2) Observe sensitive features

- A. Locate sensitive features in fields and any within 300 feet of field borders.
- B. Sensitive features with a setback include: Lakes, rivers, intermittent and perennial streams, sinkholes, drainage ditches with side inlets or without berms, and open tile inlets.
- C. All manure applications within 300 feet of a sensitive feature must be incorporated within 24 hours and before it rains.

3) Review manure application rates

- A. Follow University of MN-Extension agronomic recommendations for calculating manure rates and nutrient needs: http://tinyurl.com/l3yrpnm. MPCA web page: www.pca.state.mn.us/qp0r69c.
- B. Manure application rates should be adjusted based on changes to:
 - 1. Manure test results
 - 2. Application method
 - 3. Crop rotations
 - 4. Legume credits
 - 5. Previous applications of manure will have carry over nitrogen
 - 6. All nitrogen and phosphorus fertilizer has to be accounted for in your plan
- C. Wait to apply manure on coarse textures soils until soil temperatures are below 50 degrees.
- D. Use of a nitrogen inhibitor can reduce nitrogen losses on early applications.

4) Be prepared for an accident

- A. If you do have a spill or equipment failure that results in a spill:
 - 1. First make sure all personal are safe.
 - 2. If possible stop the source of the spill, such as shutting off a valve, driving a vehicle onto a drag line hose, or shutting off the pump.
 - 3. Stop the spill from moving off-site and into a sensitive feature.
 - 4. Use tillage to slow progress of spill towards sensitive features in fields; build a dirt berm, or use hay, straw or corn stalk bales to absorb the spill.
 - 5. Plug culverts and open tile inlets.
 - 6. Call for assistance such as a septic vacuum truck to suck up the spill.
 - 7. Review your emergency response plan. A planning sheet can be found at:
- B. If any spill occurs, call the Minnesota Duty Officer at 800-422-0798. See Emergency Response Plan form (wq-f3-12), on the web at: http://www.pca.state.mn.us/pyri69d