


Workgroup Recommendations

- Multiple meetings
- Consensus seeking
 - Consensus: unanimous agreement – could “live with”
 - Near consensus: high level of agreement (all but 1 or 2)
 - Close to near consensus: a few not in agreement
 - No agreement: broader disagreement


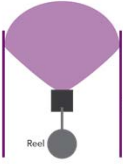




Consensus Baseline Recommendations

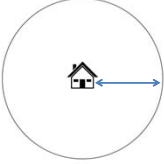
In all cases **must**:

- Follow all existing laws for animal waste and nutrient management
- Have and follow 590-standard Nutrient Management Plan
- Take appropriate steps to minimize drift
- Ensure no overspray of irrigated manure
- Have suitable means of supervising/controlling equipment
- Have suitable means of determining relevant weather info
- Have means of preventing backflow if connected to water
- Ensure no human waste or septage is processed with manure
- Drop nozzles if center pivot
- Nozzles and pressures for “coarse” or larger droplet size

Wetted Perimeter


Traveling gun			Wetted perimeter
Center pivot			Wetted perimeter

Setback Distance




Minimum distance from wetted perimeter

Setback – Road Right-of-Way



0 feet: Near consensus, all types of roads and highways

Setback – Forests



0 feet: Consensus, public forests with no recreational access
0 feet: Near consensus, private forests

Setback – Adjacent Ag Properties



0 feet: Near consensus – pasture and crops that are not organic or raw consumed
 0 – 50 feet: Close to near consensus – regardless of crop

Setback - Dwelling



500 – 750 feet: Near consensus, under various conditions for wind speed and direction
 250 feet: Close to near consensus, for some situations; no agreement for others

Recommendations Recap

- Consensus on baseline conditions
 - Follow all existing laws for animal waste and nutrient management
 - Have and follow 590-standard Nutrient Management Plan
 - Take appropriate steps to minimize drift
 - Ensure no overspray of irrigated manure
 - Have suitable means of supervising/controlling equipment
 - Have suitable means of determining relevant weather info
 - Have means of preventing backflow if connected to water
 - Ensure no human waste or septage is processed with manure
 - Drop nozzles if center pivot
 - Nozzles and pressures for “coarse” or larger droplet size
- Various levels of agreement on setback distances



Thank You

Report and additional resources available at:
<http://fyi.uwex.edu/manureirrigation/>

Burch, T., S. Spencer, J. Stokdyk, B. Kieke, R.A. Larson, A. Firnstahl, A. Rule, and M. Borchardt. 2017. Quantitative Microbial Risk Assessment for Spray Irrigation of Dairy Manure Based on an Empirical Fate and Transport Model. *Environmental Health Perspectives*, 125(8):087009.