State Regulations for Land Application

TCEQ Requirements – 30 TAC 321.31-47

"Agronomic Rates"

Land application at rates in accordance with a plan for nutrient management and...[to] provide crop with needed nutrients for optimum health and growth.

30 TAC 321.32 (1)

"Crop Requirements"

Amount of nutrients that must be present in soil to ensure that crop needs are met, while accounting for immobilization processes.

30 TAC 321.32 (16)

"Land Management Unit"

Land owned, operated, controlled, rented, or leased by AFO to which manure is OR MAY BE applied; does NOT apply to lands not owned, operated, controlled, rented, or leased by AFO for off-site transfers.

30 TAC 321.32 (25)

"Recharge Feature"

Natural or artificial; significant hydrologic connection; wells, faults, sinkholes or other direct connections; permeable soils over shallow groundwater; water courses bisecting an aquifer.

30 TAC 321.32 (46)

"Water in the State"

Groundwater, ponds, reservoirs, springs, rivers, streams, creeks, wetlands, marshes, and ALL OTHER BODIES OF SURFACE WATER, natural or artificial, navigable or non-navigable, including beds and banks of ALL watercourses.

30 TAC 321.32 (58)

"Well"

Any artificial excavation (in use, abandoned, unused, capped, plugged); for production, observation, injection, or drainage.

30 TAC 321.32 (59)

Off-Site Manure Transfers

- Selling or giving (includes subsidizing) manure to second parties for land application
- Quantities greater than a pickup load
- Maintain log of date, recipient's name and address, and amount transferred
- Make available recent nutrient analysis

30 TAC 321.36(e)(2-4)

LMU Buffers

- Sinkholes protected by 100' buffer
- Assume this applies to ANY recharge feature

30 TAC 321.36(f)

LMU Soil Sampling

- 0-2", 2-6", 6-24" if manure not incorporated
- 0-6", 6-24" if manure incorporated

30 TAC 321.36(g)(3)(D)(i-ii)

(Phosphorus provisions: 30 TAC 321.40(k)(2)

Annual Reporting

Includes "total amount of manure...
transferred to other persons during the reporting period."

30 TAC 321.36(j)(4)

Buffers for RCS or Pens

- Public drinking water wells: 500 feet
- Private drinking wells: 150 feet
- Irrigation-ONLY wells: 100 feet

30 TAC 321.38(b)

What does this have to do with land application of manure?

Buffers for Land Application

- No NEW LMUs within well buffer zones in 30 TAC 321.38(b)
- Exceptions approved case by case; require PE or PG documentation
- 100-foot buffer between application and "water in the state"

30 TAC 321.40(g)