

Standard Operating Procedure: Dairy Manure Utilization

Courtesy of Jessica Davis, Environmental Soil Scientist, CSU

Apply manure to deep (3 or more feet), level (0-1% slope), and productive soils with medium texture (not to sandy soils).

Calculate (or measure) manure production of your operation and determine the land base needed to utilize the nutrients in the manure. Then evaluate your land base to determine whether it is adequate or not. You may have to make plans for alternative, off-site manure uses.

Never apply manure to land within 100 feet of wells, creeks, or ponds.

Never apply manure or wastewater to frozen or saturated ground.

Sample manure and wastewater annually and have samples analyzed for moisture content, pH, salts, and N, P₂O₅, and K₂O concentrations.

Soil test fields receiving manure annually.

Base manure application rate on the soil and manure tests and expected crop yield.

If soil nitrate and phosphorus levels are increasing, rotate manure application to other fields.

Calculate fertilizer value of manure and reduce chemical fertilizer use accordingly.

Manage irrigation water to prevent leaching and runoff.

Minimize odors by applying manure early in the day and incorporating within 24 hours after application.

Calibrate manure application equipment annually and perform maintenance according to manufacturer's schedule.

Keep records of soil and manure tests, manure application rates, and crop yields for each field.