

Rancho Cantera LLC
Recommended Application Rates

<u>Crop</u>	<u>Yield</u>	<u>Crop Rotation</u>	<u>Application Method</u>	<u>Manure Source</u>	<u>N rate</u>	<u>P rate</u>
					<u>Gallons/Acre</u>	<u>Gallons/Acre</u>
Corn	150	Continuous Corn	Irrigate	Earthen Holding Pond	46,100	17,900
Corn	175				46,100	20,900
Corn	200				46,100	23,900

These recommended rates are based on the stated yields and crops, and assumes fields have NO recent manure applications (no N credits from manure application). These are estimates only, and can be used as guides when climate or other factors exist that require deviations from planned manure applications. Previous applications would require that these application rates be decreased from present estimates.

The recommended application rates are the rates needed to meet the nutrient requirement of the planned crop. In the case of Lagoon water and Solid manure actual application of waste at these rates may not be feasible due to volume and or water holding capacity of soil.

*N available 1st year = (Am-N * App Method Efficiency) + (OrgN * .35)*

Previous manure applications should be given N credits =

*(App rate (in 1,000 gal) * Org N (per 1,000 gal) * Mineralization Factor) / 2*

Mineralization Factors: Year 1= .35, Year 2 = .175, Year 3 = .0875, Year 4 = 0.04

Efficiency of Application = Liquid, Broadcast = 0.80, Solid, Broadcast = 0.75, Aerway = 0.90, Liquid Inject = 0.98