SDI-E SUBSURFACE DRIP IRRIGATION FOR DAIRY EFFLUENT WATER APPLICATION

WHAT IS THE SYSTEM?

A modified drip irrigation system that uses manure nutrients instead of synthetic fertilizers to grow feed crops with less environmental impacts. Netafim’s patented precision blending control system (US Patent No. 10143130) blends the fresh and effluent water for precise nutrient uptake.

GROWER BENEFITS

- Increased yields
- Reduced need for scarce water resources
- Reduced risk of polluting waterbodies
- Increased water use efficiency
- Reduces fertilizer expense with on-farm produced nutrients (effluent)

CLIMATE BENEFITS

- Reduced water use allows farmers to weather extreme droughts
- Reduced nutrient use avoids polluting water supplies
- 90% Reductions in greenhouse gas emissions

CROP ROTATION & WATER

- Average Precipitation: OCT = 11.49”
- Wheat Water Demand = 16”
- Nov = 0.79”
- Corn Water Demand = 27”
- Harvest/Planting

KEYS TO SUCCESS

- 5 Cows to 1 Acre Ratio for effective nutrient management
- The use of two lagoons or settling ponds to help filter the effluent water
- Netafim’s patented blending controls for fresh/effluent water blending
- The use of sprinklers or flood irrigation for germination then transition to SDI
- Optimized and engineered effluent water intake
- Operations focus on dripline maintenance

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FIELD LAYOUT

+/-73 Acres - Corn

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