U.S. DEPARTMENT OF AGRICULTURE Natural Resources Conservation Service	**MICRO IRRIGATION SYSTEM DETAILED EVALUATION CHECKOUT WORKSHEET**	WVENG-EDCD 441 E 6/09

Land Operator _____Date _____ Prepared By _____

District _____ County _____Field Office _____

Field # ___Crop: _____ Age ____ Existing Canopy Area (ft^2)_____ Mature Canopy Area ft^2_____

Plant Spacing ___(in.);Row Spacing (in.)____Bed Width (ft)____ Rooting Depth (in) ___existing __ mature

Average Row Slope 0%____, 2%____ 3%_____, > 3%_____

Soil: Mapping Unit _____ Surface Texture _____

Actual Depth (Rooting Depth) _____ AWC _____ inches/feet

Irrigation based on Soils : Duration _____ Frequency _____ MAD _____ % _____ inches/feet

Irrigation Application based on ADPCU: _____ ADPCU (in/day) , _____ CDC, _____ ADPCUSC (in/day)

Irrigation System Hardware: ____ In line; _____ Point Source

Type of Emitter/Lateral: ____Non-Pressure Compensating, _____Pressure Compensating

Manufacturer _____ Type _____Spacing_____ EU _____% , Irrigation duration _____ hrs./day

Filter: ____ Microns Pressure at: Inlet _____ psi, Outlet _____ psi, Loss _____ psi

Manufacture Slope ___ % Manufacture run length _____ ft at ____ PSI inlet pressure

Rated Discharge per Emitter (emission point): _____GPH at _____ psi _____ psi

Emission Points per Plant _____ giving _____ gallons per plant per day

Lateral: Diameter _____ Material _____Thickness _____ Length _____ Spacing _____

Sketch of micro irrigation system layout (or see attached sheet):

Continued

System Discharge: _____ GPM, number of manifolds _____ and blocks _____

Average test manifold emission point discharges at _____ psi

Manifold = (sum of all averages _____ gph) = _____gph
(number of averages _____)

Low ¼ = (sum of low ¼ averages _____ gph) = _____ gph
(number of low ¼ averages _____)

Adjusted average emission point discharges at _____ psi

System = (DCF _____) x (manifold average _____) = _____ gph

Low ¼ = (DCF _____) x (manifold low ¼ _____) = _____ gph

Discharge test volume collected in _____ minutes (1.0 gph – 63 ML/min)

Outlet	Lateral Location on the Manifold							
Location on	Inlet End		1/3 Down		2/3 Down		Far End	
Lateral	mL	gph	mL gph		mL	gph mL		gph
Inlet End	A_____ B _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average
1/3 Down	A_____ B _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average
2/3 Down	A_____ B _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average
Far End	A_____ B _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average	_____ _____ _____ average

Continued

Lateral: inlet pressure _____ psi _____ psi _____ psi _____ psi

far end pressure _____ psi _____ psi _____ psi _____ psi

Wetted area per plant _____ ft^2 _____ ft^2 _____ ft^2 _____ ft^2

_____ % _____ % _____ % _____ %

Estimated average SMD in wetted soil volume _____

Minimum lateral inlet pressures, MLIP, on all operating manifolds:

Manifold ID: Test _____ _____ _____ _____ _____ _____ _____ _____ Ave.

Pressure, psi _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Discharge correction factor, DCF, for the system is:

DCF = _____2.5 x (average MLIP_____psi)_____ = _____ psi
(average MLIP _____ psi + (1.5 x test MLIP _____ psi)

or if the emitter discharge exponent, x = _____ is known,

DCF = (average MLIP_____psi) x _____ = _____ psi
(test MLIP psi)

Comments: _____

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