

Attachment F

Southwest Florida Water Management District

Metering Instructions

District ID No.	TEC ID No.	Location	Latitude/ Longitude	Recording Frequency
5	R1	Inflow Reclaimed line to TEC	274312.10 815932.46	monthly
6	R2	Reclaimed Line to Cooling Reservoir	274311.66 815927.00	monthly
7	SG1	Cooling Reservoir	274341.59 815823.22	bi-weekly

Note: Any proposed change to a latitude / longitude location listed above that may be greater than 100 feet shall require preapproval from the District.

1. Water Level Instructions. The staff gauge shall be surveyed according to instructions given on the District website and referenced to the North American Vertical Datum 1988, and a copy of the survey indicating the datum reference shall be submitted with the first water level data report. The staff gauge shall be scaled in one-tenth foot increments and shall be sized and placed so as to be clearly visible from an easily accessible point of land. Water levels shall be recorded on a frequency as indicated in the table provided in the special condition and reported to the District Water Use Permit Bureau, online via the WUP Portal at the District website or in hardcopy on District-provided forms on or before the tenth day of the following month. To the maximum extent possible, water levels shall be recorded on a regular schedule as indicated in the recording timetable below. The frequency of recording may be modified by the District Water Use Permit Bureau Chief, as necessary to ensure the protection of the resource.

Water Level Recording Timetable

Frequency	Recording Schedule
Daily	Same time of each day
Weekly	Same day of each week
Bi-Weekly	Same day every two weeks
Monthly	Same week of each month
Quarterly	Same week of months specified

2. Metering Instructions. TEC shall meter withdrawals/discharges from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter readings shall be reported to the District Water Use Permit Bureau on or before the tenth day of the following month. TEC shall submit meter readings online using the Permit Information Center at www.swfwmd.state.fl.us/permits/epermitting/ or on District supplied scanning forms unless another arrangement for submission of this data has been approved by the District. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the District Water Use Permit Bureau in Tampa at (813) 985-7481 if difficulty is encountered.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

a. The meters shall be non-resettable, totalizing flow meters that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months authorized quantities. If other measuring devices are proposed, prior to installation, approval shall be obtained in writing from the District Water Use Permit Bureau Chief.

b. TEC shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.

c. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the District indicating the same meter reading as was submitted the previous month.

d. The flow meters or other approved devices shall have and maintain an accuracy within five percent of the actual flow as installed.

e. Meter accuracy testing requirements:

(1) For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.

(2) The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions, every five years in the assigned month for the county, beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy test requirement for existing meters.

(3) The testing frequency will be decreased if TEC demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.

(4) The test will be accepted by the District only if performed by a person knowledgeable in the testing equipment used.

(5) If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, TEC shall have the meter re-calibrated, repaired, or replaced, whichever is necessary.

Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.

f. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to 10 times the outside pipe diameter and a downstream length equal to 2 times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.

g. Broken or malfunctioning meter:

(1) If the meter or other flow measuring device malfunctions or breaks, TEC shall notify the District within 15 days of discovering the malfunction or breakage.

(2) The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.

(3) If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

h. While the meter is not functioning correctly, TEC shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on District scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.

i. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. TEC shall notify the District of the replacement with the first submittal of meter readings from the new meter.

3. Flow Meter Accuracy Test Instructions.

a. Accuracy Test Due Date - TEC is to schedule their accuracy test according to the following schedule:

(1) For existing metered withdrawal points, add five years to the previous test year, and make the test in March.

(2) For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in March.

(3) For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in March.

(4) For TEC's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, TEC can submit a request in writing to the District Water Use Permit Bureau Chief for one specific year to be assigned as the due date year for meter testing.

(5) The month for accuracy testing of meters is March. TEC is requested but not required to have testing done in March. This is to have sufficient District staff available for assistance.

b. Accuracy Test Requirements: TEC shall test the accuracy of flow meters on authorized withdrawal points as follows:

(1) The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.

(2) A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.

(3) If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.

(4) The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

c. Accuracy Test Report: TEC shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test:

(1) A completed Flow Meter Accuracy verification Form, Form LEG-R.014.00 (07/08) for each flow meter tested. This form can be obtained from the District's website (www.watmatters.org) under "ePermitting and Rules" for Water Use Permits.

(2) A printout of data that was input into the test equipment, if the test equipment is capable of creating such a printout;

(3) A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing;

(4) The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.

(5) A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.

(6) A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items with a notation of distances to these items.