

LARGE GROUNDWATER WITHDRAWAL PERMIT
REVISED ELECTRONIC DATA REPORTING GUIDELINES

October 23, 2012

The following table is an example of the electronic data reporting file used to report water level-related data from field measurements or automated recording devices. The file entitled “LGWP_Electronic_Data_Reporting_File_Template.xls” is a spreadsheet in Microsoft Excel file format. The reporting file is provided in MS Excel spreadsheet format for your convenience only; however, using it is not a requirement. If data is submitted in a spreadsheet format, data may be split between multiple worksheets by Station_ID. If a different product is used, then it must contain the same column header names shown below and be submitted as a “text” file with either comma- or tab-delimited variables.

Table 1. Example electronic data reporting file.

Station_ID	Station_Name	Date	Water_Level_Depth	Comment	Depth_Method
20070001DW01	DRINKING WELL HOUSE #1	07/03/2007 10:30:00	38.020	Ref pt=TOC	ELECTRIC-TAPE MEASUREMENT
20070001DW01	DRINKING WELL HOUSE #1	07/03/2007 14:30:00	40.150	Ref pt=TOC	ELECTRIC-TAPE MEASUREMENT
20070001DW01	DRINKING WELL HOUSE #1	07/03/2007 18:30:00	43.120	Ref pt=TOC	ELECTRIC-TAPE MEASUREMENT
20070001MWNO9	MONITORING WELL NO. 9	07/15/2007 10:30:00	81.025	Ref pt=TOC	TRANSDUCER
20070001MWNO9	MONITORING WELL NO. 9	07/15/2007 14:30:00	81.035	Ref pt=TOC	TRANSDUCER
20070001MWNO9	MONITORING WELL NO. 9	07/15/2007 18:30:00	3.220	Ref pt=TOS	TRANSDUCER
20070001MWNO9	MONITORING WELL NO. 9	07/15/2007 22:30:00	4.340	Ref pt=TOS	TRANSDUCER

The following are descriptions and data types for the columns shown in Table No. 1 above.

Station_ID: This is a unique, fixed ID assigned to each water level monitoring location included in a large groundwater withdrawal permit. This ID is assigned by DES and *can not be changed or edited*. As shown in the example above, this ID needs to appear in each row that contains a water level measurement for a given location, and must be present in all electronic submittals. Table No. 2 below includes an example of DES-assigned station IDs for monitoring points included in a permit that would be used in all future submittals.

Table 2. Example of station names and IDs assigned to a permit.

Station_Name	Station_ID
MONITORING WELL OW6	20100003MWOW6
MONITORING WELL OW8	20100003MWOW8
MONITORING WELL OW9	20100003MWOW9
PRODUCTION WELL PW-1	20100003PWPW1
PRODUCTION WELL PW-2	20100003PWPW2

Station_Name: This is a fixed text string that corresponds to the name of each water level monitoring location included in a large groundwater withdrawal permit. This name is assigned by DES and *can not be changed or edited*. As shown in the example table above, this name needs to appear in each row that contains a water level measurement for a given location, and must be present in all electronic submittals.

Date: As shown in the example table above, this data column shall be in the format of DATE TIME, where DATE is in the form of mm/dd/yyyy, and TIME is in the form of hh:mm:ss and referenced to a 24-hour clock or “military” time, i.e. do not include an “AM” or “PM.” Note also that there shall be one space between the DATE and TIME entries.

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Water_Level_Depth: This is the depth to water in feet when measured from the reference point (z-positive downward). Common reference points are top-of-casing, top-of-stake or top-of-PVC, etc. Please note that if water levels are recorded electronically using a pressure transducer that operates in a different “mode” (for example, it records height of water column above the device, or water level referenced to a site-specific datum), the water level data will need to be transformed to depth to water from the reference point prior to reporting to DES.

The format of `Water_Level_Depth` is numeric and can be up to eight digits, with no more than three digits to the right of the decimal point. Note that the decimal point is not counted as a digit.

Please note that, if for some reason, water levels were not recorded at a monitoring location included in a permit due to access limitations, equipment malfunction, monitoring oversight, etc.; just describe and provide the reason for the absent data in the full-text portion of the annual report. **Do Not** input a non-numeric entry into this column like NM (not measured) or NR (not recorded) for absent data.

Comment: This is a text column with space for up to 256 *characters*. Comments can relate to any location-specific information necessary to qualify the depth to water measurement, and are based largely on the professional judgment of the individual data collector. Common comments include identification of a location’s reference point for measurements, observed condition of the monitoring point when measurement was collected, noted problems with recording device when measurement was recorded, etc.

Depth_Method: This is a text column and the following four entries are the **only valid entries allowed**. These entries are listed in the worksheet titled “`Depth_Method List`” in the provided spreadsheet.

- **TRANSDUCER:** for a water level measurement recorded with an electronic pressure transducer commonly installed in a well or piezometer.
- **ELECTRIC-TAPE MEASUREMENT:** for a water level measurement recorded with an electric water level tape measure in a well or piezometer. Commonly these tape measures are equipped with a metallic probe or tip that contains a conductivity-bridge circuit that chimes or beeps when submerged in water.
- **NON-RECORDING GAGE:** for a water level measurement recorded off of a calibrated staff/stream gage or non-marked stake installed in a surface water body. This entry is not commonly applicable to wells.
- **OTHER:** for all other water level measurement methods. Please describe the method in the **Comment** column.