

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



METERING PLAN PREPARATION GUIDANCE FOR WATER WITHDRAWALS BY THE NATURAL GAS INDUSTRY

The Susquehanna River Basin Commission (Commission) prepared this document to guide preparation of a metering plan for water withdrawals intended for the gas well industry. A plan must be submitted and approved for each withdrawal location.

The withdrawal metering plan should provide, at a minimum, the following information about the intake and metering, as specified below:

Intake Design – The intake should be designed as a tamper-resistant, semi-permanent or permanent structure.

- Describe the intake design and type, and model of the intake or pump.
- Include information on the maximum instantaneous pump capacity.
- Describe the features that will be installed to avoid entrainment and impingement of aquatic life.
- Provide information about any piping that will be used, such as type and diameter.
- Describe the method and apparatus that will be in place so that the approved instantaneous and daily withdrawal limits cannot be exceeded.
- Provide information about the type of any water storage impoundments at the intake site and note the presence of flood plains at the intake area.

Metering – The meters, accurate to within five percent of the flow rate, must be installed in a fashion whereby they are not easily bypassed, zeroed, or reset. Note that the Commission must be notified upon installation of the meters prior to initiation of the withdrawal.

- Describe the type, make, model, and accuracy of the totalizing flow meter to be used.
- Indicate the range of flow rates the meter is capable of measuring.
- Provide the meter's specification sheet, serial number, and calibration certification information.
- Provide photographs of the installed meters prior to initiating any withdrawal.
- Describe the method to be used for recording daily meter readings.
- Submit all recorded measurements to the Commission electronically on a quarterly basis, and include the destination drilling pad name and well identification number in accordance with Commission Regulation §806.30(b)(1).

Figures, Maps, and Schematics

- Provide a topographic map showing the intake location, metering points, and any proposed piping route to convey water to the drilling site impoundment location.
- Provide a process flow diagram showing how the water will be withdrawn and routed to the storage impoundment and drilling pads. Show the meter location on this flow diagram.
- Provide a performance curve for the pump.
- Provide cut sheets for the flow meter.

Property Access

Provide to the Commission a copy of all agreement letters from property owners for access to and use of land at each water withdrawal site.