

SWIP Monitoring Plan Guidelines

The surface water identification protocol (SWIP) monitoring plan must include the following:

1. Public water supply (PWS) identification number, name of PWS, correct mailing address, **contact person** at PWS, and telephone number.
2. List **sources being sampled**. Combined source sampling can only be considered if it is demonstrated that one source is representative of all or several similar sources. Physical and chemical parameters (pH, conductivity or total dissolved solids, turbidity, temperature, precipitation, flow and stage) must be **monitored** and recorded from each of the sources **daily for a total of six months**. Samples are to be taken prior to treatment.
3. List **who** will be **responsible** for collecting and reporting the data. Include back-up personnel and their telephone number. Review the procedures for collecting samples and operating and calibrating the equipment with all operators.
4. List the **DEP-approved laboratory** that will perform the weekly bacteriological analyses. Include the contact person, telephone number and DEP assigned lab number. Anticipate positive coliform bacteria results and collect a sample large enough to test for both total and ecoli. Sample results must be in numbers, not just presence/absence. Make sure the laboratory you have chosen understands the monitoring is for SWIP purposes. *Include the laboratory reports with your monthly submission.*
5. A schedule for the six months of monitoring (**anticipated start and end dates**).
6. Source construction details and/or drawings for the spring houses or wells. Refer to Attachment 1 – Page 1. If available, submit a plan view and cross-sectional view of the spring house or well log. Take whatever steps are necessary to clean, seal, and vermin-proof spring houses before monitoring occurs.
7. A **schematic of the system in plan view** from the treatment system back to the source showing the location of the sample points and the sources being sampled. Refer to Attachment 1 – Page 2
8. A 7.5-minute quad sheet or (enlarged) portion thereof showing:
 - a) Name of the quad sheet.
 - b) Scale.
 - c) Sampling locations.
 - d) Rain gauge location.
 - e) Stream staff gauge.
 - f) Route numbers or street names of nearest roads to sources.
 - g) Locate and explain obvious sources of contamination (i.e., underground storage tanks, feedlots, industrial/commercial land use zones, septic systems, etc.) near any of the sources. If none, state so in the monitoring report.
 - h) Clearly define the surface drainage basin that surrounds the sources.
9. **Discuss how and where data will be collected**. If the rainfall data is not to be collected by the system, provide the source of the information along with their address and telephone number. State if water level measurement from wells will be static or pumping levels.

10. A description of the **calibration, maintenance and units of the equipment** must be included. Refer to Attachment 1 – Page 1. Record all data in consistent units, using decimals (50.18 feet) instead of fractions (50 feet 3/16 inches). Describe the instruments and/or services used to monitor the following parameters:
 - a) Static or pumping water level.
 - b) Discharge from sources.
 - c) Precipitation.
 - d) pH.
 - e) Stage (depth of stream).
 - f) Conductivity or total dissolved solids.
 - g) Turbidity.
 - h) Flow rate of spring in gallons per day (gpd).
 - i) Temperature.
11. Surface water flow in the drainage basins that contain springs must be characterized. Provide enough flow level data, by use of staff gauges, to describe the surface flow and possible relationship with the spring.
12. Use the blank **SWIP reporting forms** in Attachment 2 to record daily and weekly monitoring data. Include on the report form explanations of anomalous events which may impact daily monitoring results. Monitoring results shall be submitted monthly within 30 days of the end of the month. Evidence of falsification of data on the part of the system shall be evaluated for submittal to the Office of Attorney General for further investigation.
13. Indicate if a hose bibb **sampling tap** is in the **raw water** line before treatment.