

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Safe Drinking Water

DOCUMENT NUMBER: 393-3130-308

TITLE: New Source Sampling Requirements for Transient Noncommunity Groundwater Sources

EFFECTIVE DATE: December 14, 2013

AUTHORITY: Pennsylvania's Safe Drinking Water Act (35 P.S. §721.1 *et seq.*) and regulations at 25 Pa. Code Chapter 109.

POLICY: Department of Environmental Protection (DEP) staff will follow the guidance and procedures presented in this document to direct and support implementation of new source sampling activities under the Safe Drinking Water Program.

PURPOSE: The purpose of this document is to establish a rational and reasonable basis for staff decisions which will promote quality, timely and consistent service to the public and regulated community.

APPLICABILITY: This guidance will apply to sampling of new groundwater sources of public water supply for transient noncommunity water systems that do not require a DEP-issued construction permit.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

PAGE LENGTH: 3 pages

DEFINITIONS: See 25 Pa. Code Chapter 109

Introduction

This guidance outlines the procedures and lists the minimum new source sampling requirements for transient noncommunity groundwater systems that do not require a construction permit under 25 Pa. Code §109.503. The new source sampling does not apply when the new source is finished water obtained from an existing permitted community water system or an existing permitted or approved noncommunity water system unless the DEP provides written notice otherwise. It is recommended that a public water supplier, which does not require a construction permit, contact the appropriate DEP regional office to obtain information on the specific new source sampling requirements and additional guidance on sampling procedures.

Sample Collection

Except where noted otherwise, the public water supplier or its consultant is responsible for collecting the new source groundwater samples. If a constant-rate pumping test is conducted on the proposed groundwater source, the samples should be collected immediately following that test, when the aquifer is stressed and most representative of groundwater quality. Samples should be collected from a sampling port directly from the groundwater discharge pipe in an appropriate manner that does not alter the original groundwater chemistry. If no test is conducted, the groundwater samples should be collected directly from the production well prior to any filtration and/or treatment so that the original groundwater chemistry is not altered. In order to achieve reliable laboratory results, proper collection, preparation and storage of water samples and the use of appropriate sampling equipment and techniques should be followed and documented.

Laboratory Analysis

All analyses of samples should be performed by a laboratory that is certified by the DEP under Subchapter H of 25 Pa. Code Chapter 109. The samples should be submitted to the laboratory in laboratory-issued bottleware, with appropriate chain-of-custody documentation and within the required holding times.

List of Minimum Sampling Requirements

The following tables list the minimum sampling requirements for new transient noncommunity groundwater sources. Unless otherwise instructed by the DEP, all groundwater samples should be analyzed according to the list below.

MICROORGANISM CONTAMINANTS:	
TOTAL COLIFORMS CONCENTRATION	Three (3) separate samples obtained at 15-minute intervals should be collected. For each total coliform positive sample, analyze the same or equivalent sample for E. coli concentration.
TURBIDITY	Reported in nephelometric turbidity units (NTU)

INORGANIC CHEMICALS (IOCs):

NITRATE (as Nitrogen)
NITRITE (as Nitrogen)

The results of the analysis for Nitrate (as Nitrogen) and Nitrite (as Nitrogen) will be added to determine the total level of Nitrate + Nitrite (as Nitrogen).

OTHER CONTAMINANTS:

On a case-by-case basis, the DEP may require monitoring of any other contaminant as determined necessary to evaluate the potability of the source OR which the DEP has reason to believe is present in the source water and presents a health risk to the users of the system.