

# New York State Department of Health Basic Environmental Health Program

## SANITARY SURVEY of a NONCOMMUNITY PUBLIC WATER SUPPLY Field Exercise Instructions

### *Assignment*

To insure that the exercise will be as useful as possible, *the supervisor and mentor* must review these instructions, the **Basic Environmental Health Program Field Exercise Guidelines** and the exercise's **Field Assignment Report** form prior to selecting the water system to be surveyed. The student's *supervisor* must arrange for the **student to accompany a qualified mentor** on a sanitary survey of a **noncommunity** public water system with one or more **ground water sources and disinfection treatment**. The sanitary survey may be conducted in conjunction with a full inspection of a permitted facility, or it may be conducted as a separate inspection. The intention of the exercise is to *introduce the student to the concepts and procedures* of a sanitary survey. Students are not expected to be able to independently perform sanitary survey related activity without substantial additional training and mentoring.

*The student should assist or shadow the mentor* in all aspects of the survey, including:

- review of file information prior to the survey (facility description, compliance history, etc.)
- field inspection of the source, treatment, and operational status
- completion of appropriate documentation related to the survey findings (including a Water System Field Compliance Report form DOH 4234; and related SDWIS data entry)
- follow-up activity in response to violations or problems found during the survey.

Upon completion of the Field Assignment Report form, the student, mentor, and the student's supervisor must sign the affirmation at the bottom of the report. **Completed Field Assignment Report forms must be submitted to:**

School of Public Health  
One University Place  
Rensselaer, NY 12144 or faxed to (518) 402-1137.

**prior to the Concepts of Water Supply Protection class.** (This instruction page should be detached prior to submission.) The student should **retain a copy of the completed report and bring it to class for potential discussion.**

### *Learning Objectives*

After completing this assignment, the student will be able to:

- Identify system components of a non-community public water system (NCWS) with a ground water source and basic water disinfection treatment (chlorination and/or ultraviolet);
- Determine if a NCWS is in compliance with routine monitoring requirements;
- Describe examples of violations and significant deficiencies typically found at a NCWS;
- Describe ground water source protection issues;
- Understand basic public water supply inventory and record keeping system concepts;
- Describe violation response procedures.

Questions on this exercise may be referred to Nick Mottolese, Bureau of Water Supply Protection [518-402-7650 or [tnm01@health.state.ny.us](mailto:tnm01@health.state.ny.us)]

**Field Assignment Report****Sanitary Survey of a Noncommunity Public Water Supply (PWS)**

Supervisor, mentor, and student should refer to the **Instructions** page prior to beginning the exercise.

Student Name: \_\_\_\_\_

Health Department Unit: \_\_\_\_\_ Sanitary Survey Date: \_\_ \_\_ \_\_

PWS Name: \_\_\_\_\_ PWS ID# \_\_\_\_\_

Type of Facility Served by this PWS: (restaurant, campground, etc.) \_\_\_\_\_

A) **PREPARATION AND FILE REVIEW** – The mentor provides an introduction to the basic SSC Part 5 requirements that apply to a **noncommunity PWS with disinfection treatment** (approval of new sources and treatment, microbiological and nitrate monitoring, minimum treatment, treatment monitoring and operation reports, reporting emergencies). With the mentor's assistance, the student reviews the file of the selected facility and answers the following questions.

1. **Describe** the water source(s) [well type, depth, yield].
2. Has the source been evaluated for potential Ground Water Under the Direct Influence of Surface Water (GWUDI) ?

YES \_\_\_ NO \_\_\_

3. **Describe** the treatment provided at this system (i.e. chlorination, UV, filtration)

4. Has the PWS submitted operation report forms as required during this period?

YES \_\_\_ NO \_\_\_ (explain)

5. For the previous 12 months, has the PWS conducted required water quality monitoring (microbiological & nitrate, and any other required routine testing), and have the results been satisfactory ?

YES \_\_\_ NO \_\_\_ (explain)

6. Does the record show any outstanding water violations or correction orders?

NO \_\_\_ YES \_\_\_ (explain)

B) **FIELD VISIT OBSERVATIONS** – The student accompanies the mentor on a field inspection of the PWS. During the inspection, he/she observes completing a Water System Field Compliance Report (DOH form 4234), observes as the form 4234 is provided to the operator, and makes observations to answer the following questions (continue on page 2).

1. **Identify** any potential sources of contamination near the well(s) [septic systems, petroleum storage facilities, farming activity, storm water drainage, etc.] and the approximate distance from the well(s) for each contaminant source.
  
2. Did well construction features appear satisfactory [e.g. well terminates above ground, tight-fitting cap/seal, area around the casing sloped to prevent ponding of surface water, protected against physical damage from vehicles] ?  
**YES** \_\_\_      **NO**\_\_\_ (explain)
  
3. **Diagram** water flow through the system (source, treatment, storage, distribution & pump components).

4. Was the disinfection system operating properly ?      **YES**\_\_\_      **NO**\_\_\_  

<u>Chlorination systems</u> – injection pump working – appropriate chlorine residual present – <b>chlorine residual reading:</b> _____mg/l	<u>Ultraviolet Systems</u> - light intensity adequate - intensity monitor connected to an alarm and a solenoid flow shutoff valve
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**Explain any deficiencies or problems found:**

5. **Describe** any violations and other significant deficiencies identified during the field visit.

**C) DATA RECORDING AND FOLLOW-UP** – The student observes the mentor and/or other unit staff as the site visit and system inventory information is updated in SDWIS and other local health department formats.

1. Were any of these additional follow-up actions taken by the local health department?
  - Completed Field Compliance Report form 4234 **mailed to the owner** or other responsible party
  - Narrative report written** and transmitted to the operator/owner
  - Correction schedule issued** for violations found
  - Formal enforcement action** taken (describe):

The following signatures certify that this work was completed by this student in conformance with the Basic Environmental Health Program Field Exercise Guidelines and sanitary survey field exercise Instructions.

	Signature	Name (print)	Title
Student: >	_____	_____	_____
Mentor: >	_____	_____	_____
Supervisor: >	_____	_____	_____