New York State Department of Health
2014 Basic Environmental Health Program
EH 109 Field Exercise Instructions
SANITARY SURVEY of a NONCOMMUNITY PUBLIC WATER SUPPLY

Assignment

To ensure that the field 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. Prior to the Concepts of Water Supply EH 109 course, the completed Field Assignment Report forms must be submitted to:

Annalee Lasch
University at Albany School of Public Health
One University Place
Rensselaer, NY 12144
Fax: (518) 402-1137
E-mail: alasch@albany.edu

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

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.
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 requirements of the State Sanitary Code (SSC), Part 5 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?
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?  
   Chlorination systems  
   – injection pump working  
   – appropriate chlorine residual present  
   – chlorine residual reading: _______mg/l  
   Ultraviolet Systems  
   – light intensity adequate  
   – intensity monitor connected to an alarm and a solenoid flow shutoff valve  
   **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.

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<thead>
<tr>
<th><strong>Signature</strong></th>
<th><strong>Name (print)</strong></th>
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<tbody>
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<td>Student:</td>
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<td>Mentor:</td>
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Supervisor: ________________________    _______________________     ________________________