

### **333-061-0075**

#### **Sanitary Surveys of Watersheds**

- (1) In water systems utilizing surface water sources or groundwater sources under the direct influence of surface water that do not provide filtration treatment, the water supplier shall conduct sanitary surveys of the watershed as deemed necessary by the water system to meet the requirements of OAR 333-061-0032(2)(b)(B). The results of the watershed survey will be reviewed by the Authority during the annual on-site inspection required by OAR 333-061-0032(2)(b)(C). The Authority recommends that systems which do provide filtration treatment for surface water sources or groundwater sources under the direct influence of surface water also conduct annual sanitary surveys of the watershed.
- (2) The survey shall include but not be limited to, an evaluation of the following man-made and natural features in the watershed and their effect on water quality:
  - (a) Nature of and condition of dams, impoundments, intake facilities, diversion works, screens, disinfection equipment, perimeter fences, signs, gates;
  - (b) Nature of surface geology, character of soils, presence of slides, character of vegetation and forests, animal population, amounts of precipitation;
  - (c) Nature of human activities, extent of cultivated and grazing land, zoning restrictions, extent of human habitation, logging activities, method of sewage disposal, proximity of fecal contamination to intake, recreational activities and measures to control activities in the watershed;
  - (d) Nature of raw water, level of coliform organisms, vulnerability assessments of potential contaminants, algae, turbidity, color, mineral constituents, detention time in reservoir, time required for flow from sources of contamination to intake;
  - (e) Type and effectiveness of measures to control contamination, and algae, disinfection applications and residuals carried, monitoring practices, patrol of borders.
- (3) A report on the findings of the survey shall be submitted annually to the Authority as required by OAR 333-061-0040(1).
- (4) The Authority recommends using the guidelines in the US EPA Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources to construct an effective watershed control management plan. A list of additional references recommended by the Authority is available upon request.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.131, 448.150

### **333-061-0076**

#### **Sanitary Surveys**

- (1) All sanitary surveys described by this rule and defined by OAR 333-061-0020(117) shall be conducted by the Authority.
- (2) Every community, NTNC and TNC water system must undergo a sanitary survey at least every five years at a frequency determined by the Authority. Water suppliers must provide the Authority, upon request:
  - (a) Any existing information that will enable the Authority to conduct the sanitary survey, including but not limited to, records relating to: monitoring, reporting and data verification; water system management and operations; and operator certification.
  - (b) Access to the entirety of the public water system, including but not limited to: source of supply; treatment; distribution system; finished water storage; pumps; and pump facilities and controls.
- (3) Every sanitary survey shall be recorded and a report sent to the water supplier following the site visit. The sanitary survey report shall include, at a minimum, the following components of a water system: source of supply; treatment; distribution system; finished water storage; pumps, pump facilities and controls; monitoring, reporting and data verification; system management and operations; and operator certification compliance.
- (4) The sanitary survey report will identify any significant deficiency specified in this section or any violation of drinking water regulations discovered during the site visit. Significant deficiencies for all water systems include, but are not limited to:
  - (a) Surface Water Treatment:
    - (A) Incorrect location for compliance turbidity monitoring;
    - (B) For systems serving more than 3,300 people, no auto-dial, call-out alarm or auto-plant shutoff for low chlorine residual;
    - (C) For conventional or direct filtration, no auto-dial, call-out alarm or auto-plant shutoff for high turbidity when no operator is on-site;
    - (D) For conventional filtration, settled water turbidity not measured daily;
    - (E) For conventional or direct filtration, turbidity profile not conducted on individual filters at least quarterly;
    - (F) For cartridge filtration, no pressure gauges before and after cartridge filter;
    - (G) For cartridge filtration, filters not changed according to manufacturer's recommended pressure differential; and
    - (H) For diatomaceous earth filtration, body feed not added with influent flow.
  - (b) Groundwater Well Construction:
    - (A) Sanitary seal and casing not watertight;
    - (B) Does not meet setbacks from hazards;
    - (C) Wellhead not protected from flooding;
    - (D) No raw water sample tap;
    - (E) No treated sample tap, if applicable; and

- (F) If well vent exists, not screened.
- (c) Groundwater Springbox Construction:
  - (A) Not constructed of impervious, durable material;
  - (B) No watertight access hatch/entry;
  - (C) No screened overflow;
  - (D) Does not meet setbacks from hazards;
  - (E) No raw water sample tap; and
  - (F) No treated sample tap, if applicable.
- (d) Disinfection:
  - (A) No means to adequately determine flow rate on contact chamber effluent line;
  - (B) Failure to calculate CT values correctly; and
  - (C) No means to adequately determine disinfection contact time under peak flow and minimum storage conditions.
- (e) Finished water storage:
  - (A) Hatch not locked;
  - (B) Roof and hatch not watertight;
  - (C) No flap-valve or equivalent over drain/overflow; and
  - (D) No screened vent.
- (5) Response required when significant deficiencies are identified:
  - (a) For water systems that use surface water sources or GWUDI sources, water suppliers must respond in writing to the Authority within 45 days of receiving the sanitary survey report.
    - (A) The water supplier's response must include:
      - (i) The plan the water supplier will follow to resolve or correct the identified significant deficiencies;
      - (ii) The plan the water supplier will follow to resolve or correct any violations of drinking water regulations identified during the sanitary survey or at any other time; and
      - (iii) The schedule the water supplier will follow to execute the plan.
    - (B) The plans and schedules identified above in subparagraphs (5)(a)(A)(i) through (iii) of this rule must be approved by the Authority.
  - (b) For water systems that use only groundwater sources, water suppliers must consult with the Authority within 30 days of receiving written notice of a significant deficiency or a violation of these rules identified during the sanitary survey. Within 120 days of receiving written notice of a significant deficiency or violation of a drinking water regulation, water suppliers must:
    - (A) Have corrected the significant deficiency or rule violation; or
    - (B) Be in compliance with an Authority approved corrective action plan.
- (6) Water suppliers that fail to respond to the Authority within the timeframe specified, are required to issue a tier 2 public notice as prescribed in OAR 333-061-0042(2)(b)(D).

- (7) Water suppliers must correct the deficiencies or violations identified in the sanitary survey according to an Authority-approved schedule as described in section (5) of this rule. Failure to do so constitutes a violation of this rule.

Stat. Auth.: ORS 448.131 & 448.150

Stats. Implemented: ORS 448.131, 448.150

### **333-061-0077**

#### **Composite Correction Program & Comprehensive Performance Evaluations**

- (1) All CPE reports as defined by OAR 333-061-0020(28) and this rule shall be conducted by the Authority.
- (2) Any public water system using surface water or groundwater under direct surface water influence which treats the water using conventional or direct filtration treatment is subject to the Composite Correction Program, including CPEs, as determined necessary or appropriate by the Authority.
- (3) Any public water system using surface water or groundwater under direct surface water influence which treats the water using conventional or direct filtration treatment that has a measured filtered water turbidity level greater than 2.0 NTU from any individual filter in two consecutive measurements taken 15 minutes apart in each of two consecutive months as stated in OAR 333-061-0040(1)(d)(B) (ii)(IV) is required to have a CPE conducted on that public water system's water treatment facility.
- (4) The CPE report shall be completed by staff and sent to the water system following the site visit. The content of the CPE report shall include, at a minimum, the following components: An assessment of the water treatment plant performance from current and historical water quality data, an evaluation of each major (treatment) unit process, an identification and prioritization of the water treatment plant performance limiting factors, and an assessment by the Authority if additional comprehensive technical assistance would be beneficial to the water system. The CPE results must be written into a report and submitted to the public water system by the Authority.
- (5) The public water system receiving the CPE report must respond in writing to the Authority within 45 days (for systems serving at least 10,000 people) or 120 days (for systems serving less than 10,000 people) of receiving the report as required by OAR 333-061-0040(1)(k). The response of the public water system must include:
  - (a) The plan the public water system will follow to resolve or correct the identified performance limiting factors that are within the water system's (and its governing body) ability to control; and
  - (b) The schedule the public water system will follow to execute the plan.
- (6) The public water system must take corrective action through the CCP according to the schedule identified in subsection (5)(b) of this rule to resolve the performance limiting factors identified. Failure by the water system to take corrective action to resolve the performance limiting factors constitutes a violation of these rules.

Stat. Auth.: ORS 448.150

Stats. Implemented: ORS 448.131, 448.150