EPB 219- Waterworks Records

Waterworks Record Sheets – Explanation

Two styles of record sheets are provided as examples of a record-keeping format that may be employed at a waterworks. These example record sheets are provided as examples to aid the permittee in the process of developing record-keeping methods and documentation for their waterworks. The permittee is ultimately responsible for developing and maintaining records which meet the requirements of Section 40 of The Waterworks and Sewage Works Regulations. One example is provided for a groundwater based plant and the other is provided for a surface water based plant. These log sheets may be adapted or expanded as necessary to fit the particular requirements of a waterworks.

The example log sheets provide columns or areas: metered water quantity [s. 40(1)(a)]; locations of samples, initials of who sampled, results [s.40(1)(c)]; types, dosages and total amounts of chemicals applied to water for treatment [s.40(1)(b)]; and disinfectant levels [s.40(1)(g)].

Other information to be recorded includes:
- departures from normal operating procedures and when these occurred [s.40(1)(d)];
- instructions to depart from normal operating practice and who gave this instruction [s.40(1)(e)];
- time, date, nature and steps taken to notify and resolve upset conditions [s.40(1)(f)];
- measures to restore low disinfectant conditions [s.40(1)(g)];
- dates and results of equipment and instrument calibration [s.40(1)(h)]; and
- dates and types of maintenance performed on equipment and actions taken to ensure the normal operation of a waterworks.

This additional information may be recorded on separate dedicated sheets, examples of which are attached, dated and signed by the responsible party or parties. Examples of these are also provided as daily supplements to the example record sheets.

Permittees and operators should also pay attention to the manner in which information in operational records or logs are to be recorded or maintained:

(a) operational records or logs must be made in chronological order, with the dates, times and testing locations clearly indicated;
(b) entries in an operational record or log must only be made by the permittee or its duly authorized agent, contractor or employee;
(c) any person making an entry in an operational record or log must do so in a manner that allows the person to be unambiguously identified as the maker of the entry;
(d) operational records or logs must be maintained for at least five years;
(e) any anomalies or instances of missing entries in an operational record or log must be accompanied by explanatory notes;
(f) operational records or logs must only contain data or information that is actually observed or produced;
(g) operational records or logs must not contain default values generated manually or by automated means; and
(h) operational records or logs maintained pursuant to clause (d) must be made available promptly or on request of the Minister.
Daily Log Supplementary Information - Example

Water Treatment Plant          Date          Signature

The following departures from normal operating procedures occurred on the following date and time:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

The following instructions were given to depart from normal operating practice and were given by:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Upset conditions occurred as described below (including times/date/location) and the following steps taken to notify and resolve upset conditions:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Low disinfectant conditions existed at (location/time/date) and the following measures were taken to restore proper disinfectant levels:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Equipment calibration and/or instrument calibration occurred on the following date/time and the results are noted below:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Maintenance was performed on equipment on the date and time as noted below:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

The following actions taken to ensure the normal operation of waterworks:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
<table>
<thead>
<tr>
<th>Date</th>
<th>Water Treatment Plant</th>
<th>Daily Chemical Used</th>
<th>Test Result at Water Treatment Plant &amp; Distribution System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comments (See Explanation)</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Per Minute for Backwash Rate:</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl water</td>
<td>ALK</td>
</tr>
<tr>
<td>cl water</td>
<td>ALK</td>
</tr>
<tr>
<td>cl water</td>
<td>ALK</td>
</tr>
<tr>
<td>cl water</td>
<td>ALK</td>
</tr>
<tr>
<td>cl water</td>
<td>ALK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Filter Backwash Data:</th>
<th>Stock Solution Strength:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: Surface Water

Date: ____________________________