**Scenario: Loss of Positive Pressure Situation**

*ABC Water Authority*

- CWS serving 1,500 people
- None of the on-site distribution crew members are certified operators
- The O&M Plan contains a copy of AWWA Standard C-651-05
- The line break is located in an area served by on-lot septic systems. Water lines were recently extended to serve drinking water in this area due to known overloaded septic systems.

**Timeline of Events**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 AM</td>
<td>The Water Authority receives several complaints of water outages.</td>
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<tr>
<td>8:30 AM</td>
<td>Distribution crew members arrive on site, observe standing water in the street and suspect a water line break.</td>
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<tr>
<td>10:00 AM</td>
<td>A trench is dug and crew members observe a visible rupture in the main. The trench is filled with water.</td>
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<tr>
<td>10:30 AM</td>
<td>The trench is dewatered and further inspection reveals water is no longer leaking from the break.</td>
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<tr>
<td>11:00 AM</td>
<td>Crew members begin repairs.</td>
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<tr>
<td>3:00 PM</td>
<td>Repairs are completed. The lines are flushed.</td>
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<tr>
<td>3:30 PM</td>
<td>The main is returned to service.</td>
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</table>
Questions & Answers:

1. Should this system have notified DEP within 1 hour?
   
   Yes. The system experienced a loss of positive pressure. The on-lot septic systems and flooded trench represent a high risk of contamination.

2. If yes, when did the time clock start?
   
   10:30 AM

3. Should this system have issued a BWA?
   
   Yes. There was a loss of positive pressure and a high risk of contamination.

4. Were repairs completed as per Standard C-651-05 and DEP’s policy?
   
   No. Disinfection procedures were not followed. Bacteriological samples were not taken and the system did not meet the criteria to avoid sampling.

5. Did this system incur any violations?
   
   Yes.
   109.4(3) Failure to effectively operate and maintain PWS facilities.
   109.4(4) Failure to take investigative or corrective actions necessary to assure safe and potable water is continuously supplied.
   109.408(a) & (b) Failure to consult with DEP and issue Tier 1 PN.
   109.701(a)(3) Failure to notify DEP within 1 hour.

6. If yes, what follow-up actions should this system and/or DEP take?
   
   DEP should issue a Field Order, requiring: PN in the form of a BWA within 24 hours, flushing, increased Cl2 residuals, and the collection of check samples until 2 consecutive days are negative.
   The system should comply with the Field Order.