

Course 3 – Assessment Quiz

Which of the following is a field-based tool to evaluate CCT?

Pourbaix diagrams

Solubility curves

Bench-scale testing

Partial-system test

EPA guidance indicates that desktop studies should evaluate and summarize existing raw, entry point, and distribution system data.

True

False

Corrosion control indices should be used to assess lead and copper solubility.

True

False

EPA flow charts can be used for what?

Identifying common materials in the distribution system

Evaluating historical water quality data

Identifying initial treatment strategies or targets for further consideration

Collecting water samples

What tools can be used to calculate water quality conditions?

PHREEQC

RTW Model

WaterPro

A and C

B and C

Solubility diagrams can be used to predict relative impacts to theoretical lead and copper concentrations.

True

False

Solubility diagrams often predict actual scales formed in the distribution system.

True

False

Which of the following should be considered for chemical selection?

Worker and community safety

Effectiveness

Ease of implementation

Operability

A and C

A, B, C and D

When might you consider scale analysis?

When a system consists of primarily PVC pipe

When a system has potential legacy metals (Al, Fe, Mn)

When a system consists of primarily new copper pipe

X-Ray Fluorescence provides information on elemental composition of samples.

True

False

Pipe volume is a critical component when conducting profile sampling.

True

False

Which of the following is a common source of lead?

Lead service lines

Cast iron pipe

Brass

A and C

A, B, and C

Acclimation of harvested materials at the bench-scale level is typically 30 days.

True

False

Disinfection byproduct speciation/concentrations can change due to which CCT strategy(s).

pH/alkalinity adjustment

phosphate addition

both A and B

Which of the following should typically be included in an implementation plan?

Troubleshooting

Design criteria

Performance monitoring

A, B and C

B and C

Legacy deposits are not impacted by changes in water chemistry.

True

False

Sentinel sampling represents a set of homes regularly monitored for select water quality parameters (e.g., lead, copper, pH, alkalinity, orthophosphate).

True

False

Relevant and meaningful data should be collected during the CCT implementation process to verify CCT targets and to identify any unintended consequences.

True

False

Which of the following is an appropriate data visualization tool when evaluating minimum, maximum, and various percentiles (i.e., 25th, 50th, and 75th) from dozens of distribution system sites?

Time series charts

Bar charts

Box and whisker plots

GIS maps

pH variability in a distribution system could be due to analytical and sampling techniques.

True

False