



## Guidance for Manufacturers

It is anticipated that not all MEP Learners will work directly with end-users or work in the field or application. If you do not work in the field, it would be ideal to work with your sales team or dealer network to obtain the customer information needed to complete activities in the program.

In summary, there is some flexibility in how the questions are approached as long as the learning objective is adequately realized (see "Description" in the learning activity). The overall purpose is to demonstrate your critical thinking and application of the training concepts to the field most applicable to you. Please find below examples of acceptable modifications of activities that require customer interactions. If you have any questions, please contact WQA Professional Certification and Training at [education@wqa.org](mailto:education@wqa.org) for assistance.

### C1-F-Water Quality Basics Module

1. LA-B8-Local Water Hardness
  - a. If your company were to offer testing, what kind of equipment would be appropriate?
2. LA-B9-Test for Water Hardness
  - a. If you do not have access to a water hardness test kit, watch this YouTube video as an alternative to this activity: <https://www.youtube.com/watch?v=eHHWfvg5jF4>
3. LA-B13-Private Water Supply Tests Results
  - a. Work with service or sales department, or contact WQA for case study.
4. LA-B17-Select a Test
  - a. If you do not have access to a conduct a pH test of your water, watch this YouTube video as an alternative to this activity:  
<https://www.youtube.com/watch?v=CMhtgXM743I>
5. LA-B27-Reverse osmosis and TDS
  - a. If you do not have access to RO water, watch this YouTube video as an alternative:  
<https://www.youtube.com/watch?v=DzerzGbWMyw>
6. LA-B30-Handling Customer Phone Calls
  - a. The 20 customer phone calls may either be observed from a dealer, colleague, or if neither of those options are available, then you may use 20 calls from your job role to satisfy the activity.
7. LA-F37-Ride-along/Phone-along
  - a. For these, set up a phone call between the Learner and someone in your dealer network in the sales, installation, and service job roles for the end-use of your product. This allows the learner the opportunity to better understand the end-use of the product.

### C2-F-Water Quality Fundamentals Module:

1. LA-F3: Your Company's Softening Systems
  - a. Find cation exchange softener systems by searching WQA Gold Seal product listings to NSF/ANSI 44 here: <https://www.wqa.org/Find-Products#/>
2. LA-F5 3, 4, and 5: Calculate Softener Capacity
  - a. Customer #1
    - i. Hardness: 20gpg
    - ii. Iron: 2.0 ppm
    - iii. Household: 4 people



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- b. Customer #2
    - i. Hardness: 35gpg
    - ii. Iron: 4.0 ppm
    - iii. Household: 3 people
  - c. Customer #3
    - i. Hardness: 10gpg
    - ii. Iron: 0.5ppm
    - iii. Household: 4
3. LA-F8: Calculate % Rejection for RO
- a. Customer #1
    - i. Feed-water contaminant: Arsenic V
    - ii. Concentration: 10.00ppm
    - iii. Feed-water TDS: 150ppm
    - iv. Rejection rating: 96%
    - v. Feed-water pressure: 60psi
    - vi. Back pressure: 7psi
    - vii. Minimum operating pressure: 40psi
  - b. Customer #2
    - i. Feed-water contaminant: Chromium
    - ii. Concentration: 5.00ppm
    - iii. Feed-water TDS: 250ppm
    - iv. Rejection rating: 96%
    - v. Feed-water pressure: 65psi
    - vi. Back pressure: 6psi
    - vii. Minimum operating pressure: 40psi
  - c. Customer #3
    - i. Feed-water contaminant: Lead
    - ii. Concentration: 0.80ppm
    - iii. Feed-water TDS: 200ppm
    - iv. Rejection rating: 96%
    - v. Feed-water pressure: 60psi
    - vi. Back pressure: 6psi
    - vii. Minimum operating pressure: 40psi
4. LA-F11-3, 4, and 5: Sizing a Filter
- a. Customer #1
  - b. Contaminant: VOC's
  - c. Media: [Learner to identify from example mfr specifications sheet...]
  - d. Service flow rate:
  - e. Home has 10 WSFU's (flush-tank type); see table C to shower conversion to gallons per minute(gpm)
  - f. Available backwash rate:
  - g. Bucket test results: 5 gallons took 40 seconds to fill (convert to gpm)



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- h. See example mfr specifications sheet to choose the right model of chosen media

### Customer #2

- a. Contaminant: Iron and Manganese
- b. Media: [Learner to identify from example mfr specifications sheet...]
- c. Service flow rate:
- d. Home has 8 WSFU's (flush-tank type); see table C to shower conversion to gallons per minute(gpm)
- e. Available backwash rate:
- f. Bucket test results: 5 gallons took 45 seconds to fill (convert to gpm)
- g. See example mfr specifications sheet to choose the right model of chosen media

### Customer #3

- a. Contaminant: Copper stains from low pH
- b. Media: [Learner to identify from example mfr specifications sheet...]
- c. Service flow rate:
- d. Home has 11 WSFU's (flush-tank type); see table C and Example\_WSFUtoGPM to convert to gallons per minute(gpm)
- e. Available backwash rate:
- f. Bucket test results: 5 gallons took 30 seconds to fill (convert to gpm)
- g. See example mfr specifications sheet to choose the right model of chosen media

## 5. LA-F15-2, 3, and 4: Customer POE System Sizing

### a. Customer #1

- i. 1 kitchen sink
- ii. 1 lavatory
- iii. 1 water closer, flush-tank
- iv. 2 bathroom groups (shower/tub, lav, water closet – flush-tank type)
- v. 1 dishwasher
- vi. 1 clothes washer

### b. Customer #2

- i. 1 kitchen sink
- ii. 1 lavatory (bathroom)
- iii. 1 water closet (flush-tank type)
- iv. 1 bathroom group (shower/tub, lav, water closet - flush tank)

### c. Customer #3

- i. 1 kitchen sink
- ii. 1 bathroom group (shower/tub, lav, water closet - flush tank)

## 6. LA-F17-2, 3, and 4: Customer Service Interviews

- a. It would be ideal to interview a technician in the field for the application your company manufactures products for.



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### C7-D-Water Quality Design Module

If you do not have customer examples readily available for this specific contaminant, contact WQA for support at [education@wqa.org](mailto:education@wqa.org) or 630-505-0160.

1. LA-S1-
  - a. Step 3 – Prepare for a Customer Call
    - i. Interview someone in Sales
  - b. Step 4 - Observe a customer call
    - i. Interview someone in Sales
    - ii. Ask sales team or dealer network for help completing the Site Survey Questionnaire
2. LA-S2-Practice, Practice, Practice
  - a. Step 1: Trade Show
    - i. If you do not attend trade shows, interview a coworker that has attended a trade show.
  - b. Step 2: Cloudy Water
    - i. Modified scenarios allowed. Describe in question #1.
  - c. Step 3: Orange Stains
    - i. Modified scenarios allowed. Describe in question #1.
  - d. Step 4: Bad Taste
    - i. Modified scenarios allowed. Describe in question #1.
3. LA-S3-Solutions for Customers
  - a. 2-5 customer sales calls observed by coach/mentor
  - b. Documents to upload
    - i. Interview someone in Sales for 5 customer examples.
    - ii. Photos & attachments can be substituted with the preferred documentation process utilized by your company.
4. LA-D2-D9 and B13a-f
  - a. It is preferred to work with your Sales Dept. for contaminant examples, but WQA can also provide case study examples for these activities if your company does not have any examples to use.
5. Customer presentations
  - a. The objective is to provide a technical justification for your treatment recommendation.