

Please respond to the statements below.

Course Content

1. Do the course description and learning objectives reflect the course content?

Yes, I believe the content generally fits the objectives well, subject to potential improvements listed below.

2. Is the content presented accurately and with valuable information for operators?

Yes. There are some areas for improvement listed below, but overall I believe the information is both accurate and valuable.

Please note that I did not address differences between the handouts and the recording if the difference did not make a difference in the meaning. Assuming the goal is to have the two match, someone should go through them carefully focused on just matching those two things up.

Module 1

Section 1.4 - there's a phrase that "the federal Safe Drinking Water Act is largely focused on protecting source waters from contamination but also established national primary drinking water regulations for contaminants that may have adverse impacts on public health". I'm not sure how this phrase was developed, but it's largely backwards. The National primary drinking water standards (NPDWS) mentioned are the central hub of SDWA. Just about everything we hear about (lead and copper rule, RTCR, Arsenic MCL, etc. are NPDWS). The source water provisions within SDWA are very weak for surface waters, and limited for groundwater (although the Underground Injection Control program – UIC – is fairly strong at what it does, it's limited in scope).

Section 1.6 – although calling it "delegation" is technically correct, the specific mechanism of delegation under both SDWA and CWA is commonly known as "primacy". This is a common term frequently used (e.g. "primacy agency").

Section 1.7 – The speaker says "i.e." i.e. is Latin shorthand that basically means "in other words". It's fine to have "i.e." in written versions but it's tacky in speech (like saying "BRB" or "AKA"). The same goes for "e.g." which would be "for example".

Section 1.7 – I'm not sure why this is titled "conflicting" agency directives. Nothing in the text makes it sound like there is conflict. It does demonstrate that there isn't uniformity (that is to say, the rules are not identical everywhere but all meet a certain baseline). Some more clarity on what is meant by conflicting, or changing the title to something like "Federal, state, and location interaction" (perhaps someone can come up with something shorter) would be appropriate.

Section 1.14 – The phrase "... doesn't cause a hazard to facility or personnel, and at the same time cause a disruption to the operation..." is confusing. I think it's supposed to be "... doesn't cause a hazard to facility or personnel, and at the same time **doesn't** cause a disruption to the operation..." (change in bold)

Section 1.14 – The last paragraph in the handout for 1.14 “the rules surrounding...” is not spoken in the recording.

Section 1.17 – the handout says “when congress enacted this law” and the spoken words are “when congress enacted the Clean Water Act”. I recommend changing the handout to “when **Congress** enacted the **Clean Water Act**” (changes in bold).

Section 1.17 – The recording says “... lying to or misleading regulators...” but the text says “lying or misleading regulators”. Add to match the recording, should be “lying **to** or misleading regulators”

Section 1.21 – There is a formatting error on the last line of the text.

Section 1.21 – America’s Water Infrastructure Act does many things beyond the one pointed out here. It might be wise to mention that there are many other changes, or if you’d like for us to detail them for you we can.

Module 2

Section 1.4 – The spoken word says “and most importantly protection of public health” whereas the handout says “ultimately protection of public health” Either is fine.

Section 1.9 – Where does the phrase “for more than one hundred contaminants” come from? Looking at the NPDWR table at <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>, depending on how you count items within the list (there are lots of instances of one standard that covers multiple compounds) it’s anywhere from high 80s to high 90s. Theoretically some of the groups (like alpha particles) could constitute dozens or hundreds of different compounds. I’ve not previously heard anyone list it as 100 or more items. In the final exam, there’s a statement of “approximately 100” which I would agree is accurate.

Section 1.12 – The spoken word is considerably different than what is written for the last paragraph/sentence. Either is fine.

Module 3

All examples – It seems that all of these examples are kept “anonymous”, but the level of information necessary to understand them (and therefore included in the descriptions) combined with the relatively small number of CWA and SDWA cases (which are, as previously mentioned, highly publicized), means that it is easy to find out what entities are involved with a quick Google search, meaning they really aren’t anonymous. I also recognize the desire to focus on the content rather than the entities, however, my recommendation is to include a reference (to a court case or something similar) to each one for people to be able to look up all the details if they desire.

Section 1.10 – There is a long pause (maybe 20 seconds) from the end of the audio to the beginning of the next slide.

Section 1.13 – Do we have permission to use the portions of this content that are carried over almost word for word? Looking up this case I discovered that this paragraph is almost an exact match to a press release at <https://www.justice.gov/usao-ndil/pr/former-crestwood-water-officials-sentenced-concealing-village-s-use-well-drinking-water>, changed only to remove the name of the village:

“Because the City of Chicago tested and treated Lake Michigan water for contaminants, Crestwood, like other municipalities that purchased water directly or indirectly from Chicago, was excused from monitoring its Lake Michigan water for certain contaminants. Due to Crestwood’s use of Well #1, an unmonitored and unreported water source, the village should have periodically tested its drinking water for organic contaminants, inorganic contaminants, and radiological contaminants beginning in the 1970s.”

It's unusual to use such a chunk of information almost word-for-word without citing a source. It could be considered plagiarism if it's done without permission and/or not properly cited. At the least, it's potentially improper. I'd also recommend checking the rest of this example and the other examples (which I did not try to identify any other instances of this, if there are any).

Module 4

Section 1.5 – The first two paragraphs shown on the handouts for the slide are not included in the audio recording.

Section 1.10 – at the end of the last sentence, the handout is missing “and up through your chain of command”

Section 1.13 – The last two paragraphs from the handout are missing in the recording.

Section 1.14 – This slide is confusing, it goes straight to the answer without first asking the question.

Final Exam

There's a final exam question that has within it: “The Safe Drinking Water Act's criminal provisions cover”. The word “Act” is currently missing.

When printing the Certificate of completion, the date came out as “1/1/2019” when it was actually completed on 1/28/2019.

3. Were you able to launch the presentation quickly using one of the media player options? Which tool did you use? (Internet Explorer, Media Player....)

Aside from the “not secure” warning (described in detail at the bottom of this review), the presentation launched quickly and ran efficiently in Chrome, even on an older computer. There is a navigation issue of not being able to replay small portions (only entire clips).

4. The speaker is easy to understand, and the audio is clear. (If no, please explain...)

Yes, I think so. I don't have particularly good speakers (they're the very basic ones that come with Dell monitors) and I was able to hear and understand at a reasonable volume. **There are**

times when it would have been nice if there were subtitles (just because it's easier to follow a voice on the computer for long periods of time if you can read along without scrolling).

5. The activities, graphics, and reading material are engaging and enhance the subject matter. (If no, please explain...)

Yes, the material is generally appropriate. There are a number of times when I think it would be better if references to the material being discussed were included (such as the example enforcement cases), with the recognition that many may not explore them, but it's a good practice to link to the source material anyway.

Navigation

1. The course layout is easy to follow and understand. (Pause presentation, volume, Continue, Back, Save and Close, Submit) (If no, please explain...)

Yes, it made sense. I did notice the numbering system began with "1.1" in all four modules. Shouldn't Module 2 start with "2.1", Module 3 with "3.1", etc?

2. Instructions on navigation, system requirements, and course expectations are easy to understand and clearly stated. (If no, please explain...)

"Prev" and "Next" are pretty straightforward. However, I can't figure out how to rewind or fast forward. I wanted to listen to a particular phrase again, but the only way I could figure that out was by hitting the "circle with an arrow" button that restarts the entire segment.

Sometimes I saw the progress bar (at the bottom between play and replay buttons) move forward while the presentation was going, other times the progress bar was static. I think it has to do with color contrast.

Exam and Survey

1. The final exam and survey questions are clear and relevant. (If no, please explain...)

Yes. There was one typo (discussed above) but otherwise it seemed fine.

2. The content is clearly reflected in the exam questions. (If no, please explain...)

Yes, there wasn't anything in the exam that tripped me up based upon the material presented, or vice versa.

3. Any other feedback or ideas for improvement?

- When accessing this site, my web browser (chrome, which most users use now) places a large "Not secure" warning across the top bar. I believe this is because it is an http (standard) and not https (secure). I think about a year ago Chrome started putting big warnings of "no secure" on anything that involves a login that isn't https since it's readily hacked. Obviously this class isn't particularly sensitive information, but regardless it's

probably worth making an inquiry with IT and requesting an upgrade as soon as possible to https to avoid future problems. See “not secure” on the left-hand side.



- In the “tell us about yourself” section, the question “What one category best describes your field served/principal activity” has two different “other” options – one which is just “other” and the second which is “other, please specify”. I recommend eliminating one of these two for clarity (depending on whether or not you want students to provide that additional information).
- In the “tell us about yourself” section, there is a question that asks how many states one is licensed as an operator but does not ask which states. Is this intentional? Also, would there be value in asking for engineering licensure as well (not something I can answer but just wanted to pose the question) for those who may be management?
- In the “tell us about yourself” section, there’s a question “why did you participate in this eLearning course” which has three options that probably cover most participants. However, I suspect there may be a few here or there that take it for some other reason (for example, building knowledge of the sector). Would a “other, please specify” option be appropriate here?
- The email received when signing up for the class provides incorrect instructions. It states:

“Simply return to www.awwa.org and log-in with your AWWA website user name and password... Once you are logged in, click on “**My Courses**” and you will be taken to your personal home page where you can launch any AWWA online courses that you have purchased.”

I was unable to follow those directions because there is no “my courses” link anywhere on the home page after login. There appears to be a missing step, which is to click on your name in the upper right-hand corner of the home page, which takes you to the “My account” page. From there you can click on “my courses” and proceed.

- When entering the “my courses” page for the first time to look at this course (I had not yet opened it), the course which noted “not started” also noted “7 of 7 required items completed”. There must be something wrong with the system as both cannot be true. See this screenshot:

The screenshot shows a course card for "Water Compliance and Enforcement". On the left, there is a "GO" button and a small image of a water treatment facility with the text "online course" below it. To the right of the image, the course title "Water Compliance and Enforcement" is displayed in blue. Below the title, it says "Not started". Further right, it says "Completion Requirements:" followed by a blue progress bar that is completely filled. To the right of the progress bar, it says "7 of 7 required items completed."