



Script 5 — The Chief Operator

Recording script. Target ~15–20 minutes at a normal reading pace. Headers, bracketed notes, and timing estimates are for your reference and are not read aloud.

1. From Knowing to Doing [~1 min]

The first four scripts loaded the knowledge. The rules, contaminants, numbers, and notifications. This script is about how you use all of that when a scenario lands in front of you and the panel is waiting for you to describe your actions.

On exam day you are the chief operator, and the panel is testing whether you can take a messy situation, size it up, protect the public, and work the problem in an orderly way. That is what the REACT lens is for. REACT stands for Recognize the issue, Ensure public health, Act to address, Communicate clearly, and Transform for prevention. It is the spine of any operational or emergency answer. If you walk the five steps in order you will hit the panel's checklist almost automatically and will be able to find your next talking point.

One rule sits above all five steps. Public health comes first, and you are always showing the broader picture: your staff, the public, the press, and the regulators, whether federal, state, county, or local. Keep that in the back of your mind through every step.

2. Frame It Before You Fix It [~1 min]

Before you start answering a question, take a breath and frame the question in your mind. This is the single habit that separates a candidate who sounds like a chief operator from one who sounds like they are guessing.

Start by restating the scenario in your own words. It shows the panel you heard the problem and buys you a few seconds to organize your thoughts. Then name what kind of problem you are dealing with. Is this an operational question, or an emergency? Is the risk acute or chronic? That naming tells the panel you know where you are before you take a step.

State your assumptions out loud. Remember the ground rules of this exam. You are the chief operator of a plant that could be anywhere in California, that uses both groundwater and surface water, that may have any source problem in the book, and that has every treatment technology available. When a question is open-ended, you get to define your plant.

3. R – Recognize the Issue [~3 min]

The first move is to recognize the potential problem. What rule does this break? Second, make sure the problem is real. An alarming reading on your SCADA system, or on an online analyzer, might be the instrument and not the water. Verify the analyzer against a grab sample or a benchtop reading before

you act on it. A single strange reading with nothing else moving is a very different situation from multiple readings all trending the wrong way at once. Corroboration tells you how much to trust the alarm.

Sometimes the first signal is a customer on the phone saying the water looks, smells, or tastes off. Take that complaint seriously. It is a data point like any other, and you document and investigate it rather than wave it off. More than one real event has started as a single call that somebody almost dismissed.

Once you know the situation is real, understand its scope. How big is it? How long has it been going on? Where did the water go? Did it stay in the plant, or did it enter the distribution system? Has it reached customers? Ask yourself whether this is a true violation or just a trigger that requires action. Decide early what kind of problem this is. A plant that loses power or SCADA has an equipment and monitoring problem, which may or may not turn into a water quality problem. Knowing this distinction keeps you from sounding an alarm you do not need or missing one you do.

Ask yourself whether this could be intentional. If SCADA is behaving in a way that has no ordinary explanation, consider a cyberattack. If you find a breach at a facility or tampering at a source, consider deliberate contamination. Those possibilities change who you call and how you preserve the scene, so it is worth naming the thought even as you rule it out.

Use everything you have to see the picture. Review your SCADA trends. Check the analyzers across the plant. Send operators out into the process to lay eyes on it, because a person standing at the filter or the basin sees things an instrument may miss. Run a jar test or check your streaming current meter if it is a coagulation question. Pull a lab confirmation, and when you go out to sample, follow your sampling plan. If you have several wells or sources feeding a blend, sample each one to find which is driving the problem, because isolating a single bad source is often the fastest fix there is.

4. E – Ensure Public Health [~3 min]

Protect people and protect them in the right order. Your own staff first. You never send an operator into a situation that is dangerous to life or health. This could include a confined space, an active hazardous material release, or a building you are not sure is structurally sound after an earthquake. A hurt operator does not help anyone.

Then the public. The core idea is containment. Stop the bad water before it reaches a customer. Depending on the scenario, that means isolating or closing an intake, taking a well or a source out of service, or segregating suspect water in the clearwell instead of sending it out. If you need to buy yourself room to think, you can put the plant into a diversion mode or shut it down entirely. You do not treat and distribute something you cannot confirm you remove. If you cannot identify a contaminant or confirm your process treats it, the water does not go to the public.

While you contain the problem, protect the distribution system itself. When pressure drops, the system can pull contamination in through cross connections, so keeping positive pressure in your

mains is a public health action, not just an operations one. Remember that the water you deliver does more than one job. People drink it, but the community also fights fires with it, so losing pressure or supply puts fire protection at risk too. In some emergencies the right call is to keep the system pressurized and supplied for fire protection, under a do not use notice, even when the water is not safe to drink. Safe drinking water is no good if the community you serve burns to the ground.

Think about who is on the other end of the tap. Some of your customers are far more vulnerable than others. Hospitals, dialysis centers, nursing homes, schools, and large food operations need to hear from you first and fast. For them a water problem is an immediate crisis. Knowing where those critical and sensitive customers are, before anything goes wrong, is part of the job.

If the water has already reached people, or you are not sure, you must weigh a precautionary advisory, whether that is a boil water notice or a do not drink or do not use notice. Getting the type of advisory right matters, because for some contaminants boiling makes it worse.

5. A – Act to Address [~4 min]

Keep the water safe and keep the water available. One habit spans both halves. Stabilize before you optimize. Stop the bleeding first, get the situation under control, and only then fine-tune. Document what you are doing as you do it, because a real-time record of your decisions and your readings protects your compliance and feeds any subsequent after-action activities.

Once you've stopped the bleeding, work the process. Bring your redundant capacity online. Start a filter you hold in reserve or put a basin that normally sits in standby into service, so you spread the load and strengthen the barrier. Adjust the coagulant type, dose, or pH, and prove it with a jar test before you run it at full scale. Optimize upstream treatment processes so the filters are not carrying the whole load. And remember that you can simply slow the plant down. Reducing flow raises your CT and buys you time to think.

Keep an eye on subsystems the process quietly depends on. Do you have enough chemical on hand to keep this up? Can you get an emergency delivery if you are burning through it? If a chemical feed fails, can you switch to another approach, another disinfectant, another coagulant? For a bigger or longer event, you can bring in temporary help for the plant itself, rental treatment units or portable carbon, to carry you until the permanent fix is in.

Do not stop your thinking at the plant fence. A lot of problems live out in the distribution system, and a lot of fixes do too. Recapture or flush water that is already out of spec instead of letting it travel. Turn your storage tanks over, flush the mains, and loop your dead ends where water sits and ages.

When the water has a problem, but you still need it to meet demands, remember your options for keeping supply up. Exercise your intertie agreements and pull water from a neighboring agency. Start an alternate source such as a standby well. Blend a high source down with a cleaner one to bring the combined water under the limit. Draw on your storage buffer and know how many hours it buys you.

Reduce demand with a conservation request if you must. Bring in backup power on a generator. Go to manual operation with enough certified staff if your automation is down. Staff the response by calling people in, authorizing overtime, or bringing in a contractor. Mutual aid, through a network like the California Water and Wastewater Agency Response Network, or CalWARN, is on the table for a large event. When you truly cannot deliver safe water, you still owe the community water. That is when you stand up emergency water distribution, bottled water or a tanker, and you prioritize it toward the customers who need it most.

You are not improvising any of this from scratch. You reach for the plans you already wrote. Your operations plan is your baseline for how the plant is meant to run. Your emergency response plan tells you what to do and who to call.

6. C – Communicate Clearly [~3 min]

You are never handling this alone, and you are never handling it quietly. Notify early and notify straight.

Your regulator comes first. DDW hears from you on abnormal operation, a violation, or a shutdown. For a chemical release you widen the circle fast, to the California Office of Emergency Services, or CalOES. If you suspect a deliberate act or a cyberattack, that circle grows to include law enforcement. Warn downstream users if your problem flows toward them.

The public gets the truth through public notification, in the right tier for the urgency, and in the languages your community speaks. A notice only counts if it tells people something they can use. What happened, what the health risk is, what they should do right now, whether to use another source of water, and when you expect it fixed. When an advisory has a health dimension, you work it with your county health officer, because those messages often go out together and carry more weight when they are aligned.

Keep the message consistent. One event, one story, so that your staff, your website, and your spokesperson are all saying the same thing. Mixed messages breed rumor, and rumor is its own emergency. Give people a way to reach you, a hotline or a number on the notice, and then keep listening, because the calls that come in will help you map how far the problem has reached.

When the issue reaches you as a customer complaint, that person deserves a real answer. Tell them you are looking into it, follow up with what you find, and treat them with compassion. A dismissive reply to one caller is both the wrong way to treat someone you serve and a fast way to end up on the evening news. The press itself gets one voice, and that voice is your public information officer, or PIO. You do not have operators talking to a news crew in the parking lot. Your own staff needs to know what is happening and what their role is, and you keep your governing body and your management updated on a steady cadence rather than letting them learn about a serious event from the newspaper.

In a large emergency, this all runs through a command structure. You may activate your Emergency or Department Operations Center, EOC or DOC, and manage the response through the Incident Command System under the National Incident Management System, with you very likely serving as the on-scene Incident Commander until you are relieved.

7. T – Transform for Prevention [~2 min]

The last step is where you close the loop. Once the fire is out and the smoke has cleared, you make sure it cannot happen the same way twice.

Start with an after-action review and get everyone who was involved in the room for it. Each person saw a different piece of the event, and the full, honest picture only comes when you put all those perspectives together. Look for the root cause and not just the symptom. A filter with turbidity breakthrough is a symptom. Why it broke through is the root cause. Run it without blame, because the moment people fear punishment for reporting a near miss is the moment they stop telling you about the small problems before they become big ones.

From there you fix the causes. Establish alarms and redundancy on the monitoring that failed you. Create a written procedure for the gap you just found, an instrument-failure fallback, defined night-shift checks, clean shift-handoff and logging discipline. Train your staff on why it mattered, and cross-train them so that critical knowledge does not live in only one person's head. Budget for capital improvements if the problem is a worn-out asset and back your system up with a preventive maintenance program so the next asset does not fail the same way.

Feed everything you learned back into the plans you leaned on during the event. Update your emergency response plan. Revisit your risk and resilience assessment so it reflects the vulnerability this exposed. Tighten your source protection or a spill notification agreement. When everything is updated, practice them with drills and tabletop exercises, because a plan you have never rehearsed will not save you at three in the morning. When you show the panel this whole arc, you are showing them you think past the immediate problem, which is exactly what a chief operator does.

8. Close [~1 min]

That is the whole lens. Recognize the issue, ensure public health, act to address, communicate clearly, and transform for prevention. Run it in order and you will cover regulatory notifications, operator safety, public health, and water demand without having to hunt for talking points. The structure carries you there.

You are the chief operator, which means you lead the response, you do not try to be every hand on it. You use your team, you delegate, and you keep your own head clear enough to see the whole board. You will almost never have complete information, and you cannot always wait for it. Make the call with what you have and lean toward protecting public health every time you are unsure. You know the edge of your own authority, so you escalate to your management or your board when a decision is bigger than your seat.

Lead with your direct answer, then your supporting points, and the regulatory tie-in. Give the panel about three to four minutes. Hit the main points cleanly and stop, so there is room for potential follow-ups. You know the tools. REACT is the order you reach for them.