

Water Treatment T5 Oral Board Practice

John F. Ramirez

Contra Costa Water District

What to expect for the day of the oral?

- 1 representative from the SWRCB
- 3 panel interview



- Be prepared and relaxed
- Be well groomed and dressed
- Be professional and command presence



Introduction

- Introduce yourself to the panel
- Provide educational experience
- Provide your treatment experience
- Provide work or managerial experience

How to Answer

Describe your investigation and actions?

- Regulations
- Plant Operational Actions
- Corrective Actions
- Documentation
- Notification
- Public Notice
- Close Out Event – (Prevention of Future Event)

You receive a SCADA high combined filter effluent (CFE) turbidity alarm?

1. Regulations to Apply
 - a. 40 CFR 141
 - b. Title 22 – Chapter 17
 - i. Interim Enhanced Surface Water Treatment Rule of 1989
 - ii. LT1 Enhanced Surface Water Treatment Rule of 1999 – 2006
 - iii. LT 2 Enhanced Surface Water Treatment Rule of 2006 – 2015
2. Plant Operational Actions
 - a. Check all filters
 - b. Check probes trends on SCADA or DCS – determine how long the high NTU has been occurring
 - c. Check standby filters for readiness
 - d. Check plant processes – sedimentation basins and headworks
 - e. Check all chemical process on DCS and physically
 - f. Run Jar tests
 - g. Check instrumentation
 - h. Check NTU, temp. pH, alkalinity, TOC, and chlorine residuals
 - i. Check influent water
 - j. Take filter grab samples and evaluate results

3. Corrective Actions

- a. Adjust chemical processes – coagulants, polymer aids, filter aids, ozone and post chemicals
- b. Adjust flows if possible – slow plant rate
- c. Season backup filters and bring them into service
- d. Filter to waste or flush filters to waste
- e. Run effluent to the headworks
- f. Utilize second water source
- g. Shutdown plant if possible

4. Documentation

- a. Log incident in logbook
- b. Fill out laboratory logs

5. Notification

- a. Notify Water Treatment Superintendent, Operations and Maintenance, Water Quality, and others outlined in the Water Treatment Plant Operations Plan or SOP
 - i. Call
 - ii. Email
 - iii. Dispatch
- b. Notify mutual aid
- c. Notify SWRCB
- d. Notify impacted agencies

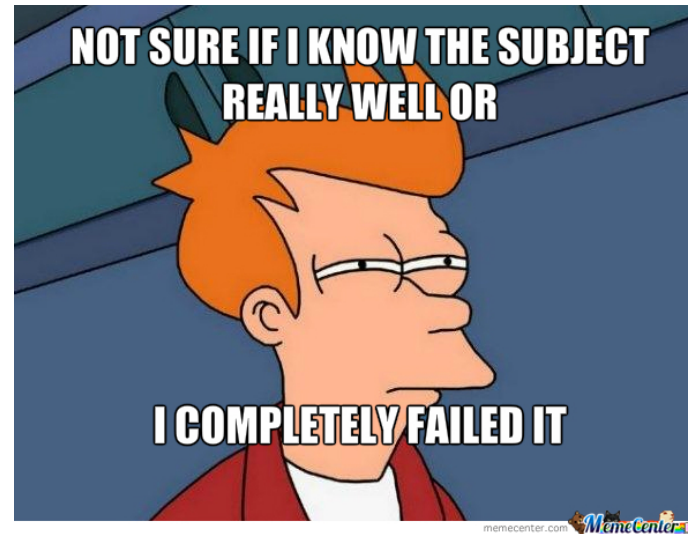
6. Public Notice

- a. Notification to the SWRCB if a Tier 1 Public Notice may be needed

7. Preventing Future Incidents or Violations

- a. Agency staff meeting and lessons learned review

Done with Question





PRACTICE QUESTIONS

The End