

Drinking Water Operator Certification and Certificate to Operate Criteria/Requirements for US Navy Overseas Drinking Water Systems

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Topics For discussion



- **Bottom Line Up Front (BLUF)**
- **Background**
- **Key Elements of Plan of Action**
- **Certificate to Operate (CTO)**
- **Operator Certification**
- **Challenges**
- **Summary**

Bottom Line Upfront (BLUF)



- Navy should establish a group – Water Quality Oversight Group (WQOG) - to perform third party overseas water quality oversight similar to that provided by EPA and/or states for drinking water systems in the United States.
- Key elements are the Certificate to Operate (CTO) and Operator training and certification
- There have been a number of challenges; namely with operator training and certification
- First CTOs will be issued in December 2012; program will be monitored and course corrected as appropriate

Background



- Navy Inspector General (IG) provided SECNAV with an Overseas Potable Water System summary report dated January 2009. The IG report identified deficiencies in management, quality and safety of overseas potable water systems and also recommended improvements in potable water management and oversight.
- In response to the summary report, Naval Facilities Engineering Command (NAVFAC) and Commander Navy Installations (CNIC) were tasked by SECNAV to develop corrective actions for improvement.

Better Get A Plan...



Plan Summary:

- Establish Oversight Group consisting of ENV, PW, BUMED
–WQOG
- Establish Regional Water Quality Boards (RWQB)
- Establish Certificate to Operate Program (CTO)
- Establish Operator Training and Certification Program
- Establish Data Repository
- Develop Consumer Confidence Reports
–Some AORs already reporting ie., Europe

Plan Establishes Command Accountability, Oversight and Operational Procedures

It's Different Overseas



Navy has invested millions in overseas drinking water infrastructure (capital costs) including **sophisticated technology** including **Reverse Osmosis, GAC filtration, UV disinfection** with less emphasis on operations and maintenance. Specifically:

- Operators are typically a mix of local national hires and sailors (utility technicians – UTs) on shore duty
- High turnover and short tour lengths for key personnel
- Insufficient operator training and no certification
- No process for independent checks by public health authority (ie., No NOV's or fines!)



Certificate to Operate (CTO)



- **Primary tool is the Sanitary Survey**
- **Sanitary Surveys conducted every 3 yrs**
- **If deficiencies exist or conditions change at a given system, the WQOG may be required to conduct a Sanitary Survey more frequently**

Certificate to Operate (CTO)



- **Sanitary Survey evaluates adequacy & compliance status of the:**
 - **Drinking water sources**
 - **Facilities**
 - **Equipment**
 - **O&M**
 - **Management**
- **For producing & distributing safe drinking water**

Certificate to Operate (CTO)



- **Deficiencies noted during Sanitary Survey may be classified as:**
 - Significant (exceed MCL, no chlorine)
 - Moderate (No CCC/BFP, pressure)
 - Minor No mapping, poor records)
- **Definitions based on USEPA's Guidance Manual for Conducting Sanitary Surveys**

Certificate to Operate (CTO)



- **Based on Sanitary Survey, WQOG will recommend:**
 - **Full Certificate to Operate**
 - **Conditional Certificate to Operate**
 - **No Certificate to Operate**

Operator Certification



- **Focus & Intent:**

- **Establish overseas operator (ORC & AORC) training and certification program equivalent to stateside EPA-certified program**
- **Classify WTPs & DSs**
- **Achieve environmental compliance and protect public health**

Operator Certification



•Key Elements:

- Establish Navy Instructions, requirements & procedures
- Classify treatment & distribution facilities
- Establish grades of certification
- Develop and implement training program
- Issue certificates and administer program
- Report to NAVFACHQ, CNIC & BUMED

Operator Certification



Details to consider:

- Levels of certification
 - **Based on System Classification**
- Provisional certification
- Reciprocity
- Renewal
- Suspension/Revocation
- Continuing education
- Certificate reinstatement
- Operator requirements

Challenges

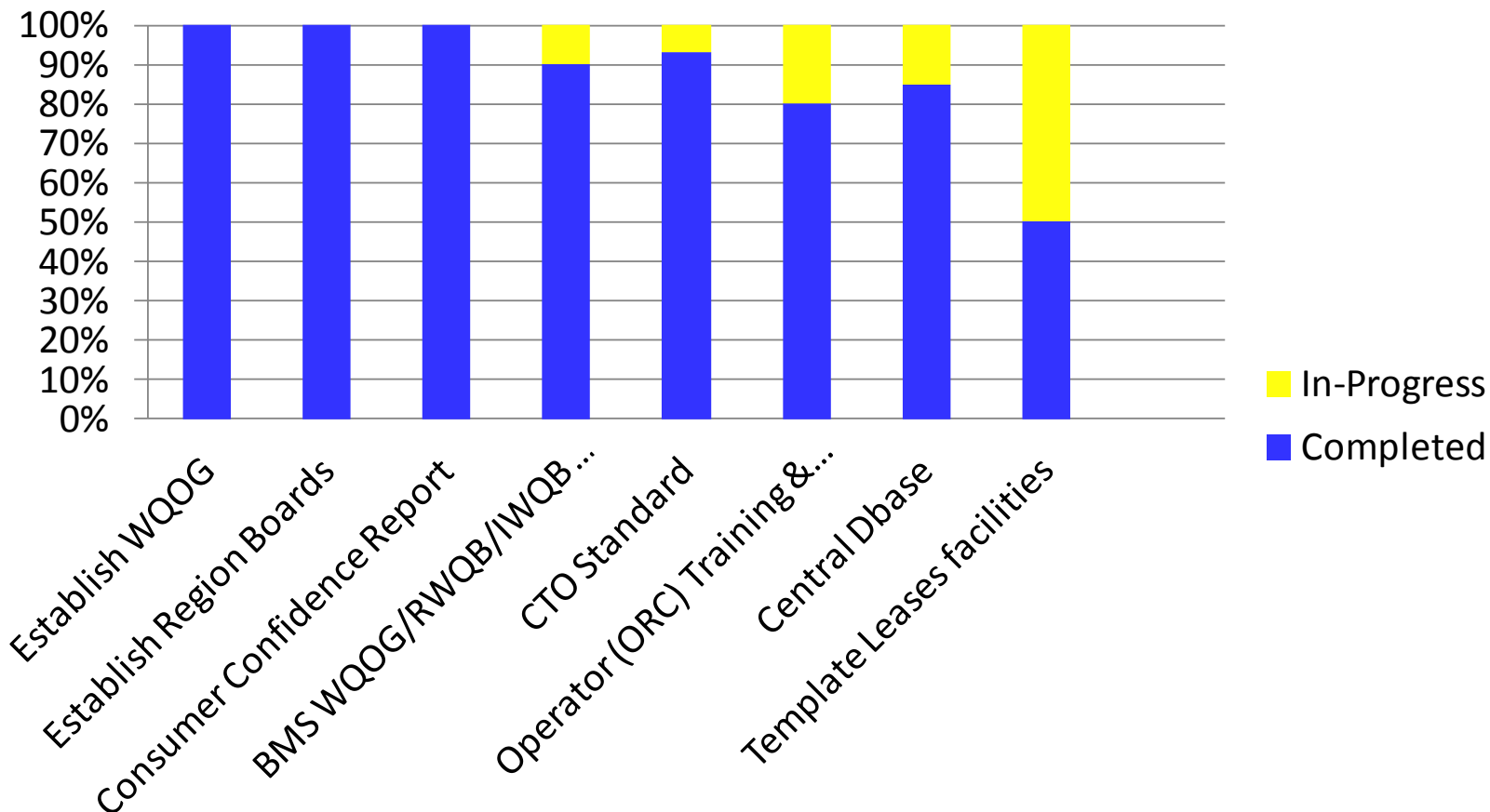


Simple, Right?!

Example Challenges:

- **Language**
- **Units**
- **Local national operators are not interchangeable**
 - Local national in Sigonella, IT would not work in Naples, IT much less Spain or Greece
- **Test needs to be tailored for specific location**
 - Not efficient or effective to know all types of treatment
- **Some local nationals work directly for HN gov't (Japan, Spain)**
- **Asking lessor to comply with US training standards will be costly if not impractical**

POAM Status



CNIC-NAVFAC POAM Status



SUMMARY:

- **Establishment of major requirements close to complete**
- **Actions to implement some requirements (training) still unfunded**
- **CTOs can still be issued while operator training program matures as long as water is deemed potable**
- **Semi-annual Meeting held 7-9 May in DC**
 - **Included CNO, CNIC, WQOG, Regions**
- **First CTOs to be issued December 2012**

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