DEPARTMENT OF THE NAVY
NAVAL INSPECTOR GENERAL
1254 9TH STREET SE
WASHINGTON NAVY YARD, DC 20374-5006

IN REPLY REFER TO:
11330
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18 Dec 15

From: Naval Inspector General
To: Vice Chief of Naval Operations

Subj: NAS SIGONELLA OVERSEAS DRINKING WATER PROGRAM ASSESSMENT

Ref: (a) NAVINSGEN ltr Ser 00/0971 of 16 Sep 15

1. This letter provides the results of the office of the Naval Inspector General (NAVINSGEN) 16-19 November, 2015 site visit to assess the four drinking water systems supporting Naval Air Station (NAS) Sigonella and Overseas Drinking Water (ODW) program management as noted in reference (a).

2. NAVINSGEN conducted a Special Study of Overseas Potable Water Systems in 2009 and identified significant problems related to operations, training and certification, maintenance and oversight, and authorities and responsibilities. The NAVINSGEN 2013 Special Study of Overseas Potable Water Systems II report indicated that the Navy was slow to correct problems identified in the 2009 study. The 2013 Sanitary Survey of NAS Sigonella identified 405 deficiencies that require corrective action to be fully compliant with CNIC 5090 series instructions and BUMEDINST 6280.10B. All drinking water systems supporting NAS Sigonella currently have Conditional Certificates to Operate.

3. This visit focused on assessing the progress made in fixing the Sanitary Survey deficiencies. The following approach was implemented to assess the NAS Sigonella ODW program:

- NAS I and NAS II plant inspections, log reviews, and operator interviews
- Marinai and Niscemi plant inspections, log reviews, and operator interviews
- Interview of Installation Water Quality Board members
- Interview of Public Works Department Environmental staff
- Interview of Environmental Health Officer Preventive Medicine Technicians
- Review of Sanitary Survey Plan of Action and Milestones
- Review of Cross Connection/Back Flow Prevention program
- Review of water system maintenance procedures
- Assessment of Duty Water Operator qualification and training program
- Assessment of Public Notification process
- Review of Utilities Major Maintenance and Repair Program
- Review of sampling, collection, and hold process

4. The NAVINSGEN team observed that considerable progress has been made since the 2013 Sanitary Survey. They found engaged leaders at the base and region that have formed a professional team committed to making drinking water safe. NAS Sigonella now has a coherent and repeatable process for plant operator certification, an ability to correct identified problems, and consistent operational standards and processes.

5. A total of $18M in water plant and distribution system improvement projects have been completed or funded for execution between Fiscal Years 2013 and 2017, and the Sigonella ODW team have closed 350 of 405 deficiencies from the 2013 Sanitary Survey report. The team anticipates that an additional 21 deficiencies will be closed by the time the 2016 Sanitary Survey kicks off in late February 2016. Only four substantial deficiencies related to the requirement to formalize ODW standards will remain open at the leased water plants at the Marinai Housing site. Real estate professionals from Naval Facilities Engineering Command Europe, Africa, and Southwest Asia are committed to execute lease modifications to codify requirements.

6. One process innovation worth mentioning is NAS Sigonella's Key Parameters (of water quality) Chart (KPC). It is widely promulgated and posted, providing a clear, user-friendly tool to ensure water treatment plant equipment and finished water characteristics remain in acceptable range. We consider the KPC a "Best Practice" since the tool includes trip wires for communicating concerns and bringing appropriate talent to bear on those concerns in a timely manner.

7. In addition to correcting the remaining Sanitary Survey deficiencies, NAVINSGEN recommends the following:

a. Interim Lab Certification. The Water Quality Oversight Council (WQOC) and Regional Water Quality Board (RWQB) should develop an interim lab certification process and should identify funding to certify local labs. Currently, NAS Sigonella and other installations in Region EURAFSWA send water samples to the Army Public Health Command (APHC) in Germany, which has led to invalid samples prior to arrival (e.g. samples froze and cracked or samples exceeded maximum temperature). An alternative to APHC is to identify, vet, and approve local labs in the local vicinity of Naples, Sigonella, Rota, Souda Bay, and Bahrain, with a priority on Naples, which would likely reduce incidence of invalid samples from Sigonella, Rota, and Souda Bay.

b. ODW lease terms. Region EURAFSWA needs to finalize lease terms relevant to ODW program to resolve relevant Sanitary Survey deficiencies, and clarify in writing the expectations, roles, and responsibilities of landlords and contractors running ODW systems at Marinai and Niscemi.

c. Site specific training. The WQOC and RWQBs should consider developing ODW training materials that addresses the water treatment methods specific to the installation. While currently available training provides familiarization with various water treatment technologies, targeted technical training would improve baseline knowledge of newly arriving personnel.

d. Succession Plan for Operator in Responsible Charge (ORC) at NAS Sigonella. The current ORC for NAS Sigonella water systems has notably improved the people, processes, attitude, and physical assets associated with Sigonella drinking water. We strongly recommend that NAS Sigonella, in coordination with the region, develop a succession plan for both the ORC and Assistant ORC to ensure the improved level of team performance continues following his tenure.

e. Translation of SOPs and training materials. We note that several of the ODW team members at Sigonella are bi-lingual and provide translation of procedures and training materials as needed. We recommend that NAS Sigonella source and complete translation of these SOPs and training materials, and adapt water system Job Qualification Requirements for local national team members to further standardize ODW processes and ensure consistency.

f. BUMED formal ODW training. BUMED is currently working to develop formal training curricula for Environmental Health Officers (EHOs) and Preventive Medicine Technicians (PMTs) who conduct sampling and analysis of drinking water from a public health perspective. We recommend that BUMED accelerate completion of this formal training program, and consider developing modules tailored to the installations (e.g. focus on reverse osmosis systems for NAS Sigonella) where EHOs and PMTs participate in the ODW program.

8. NAVINSGEN will continue to monitor progress of NAS Sigonella ODW compliance through attendance at monthly WQOC Working Group meetings, and plans to assess ODW programs in Bahrain and Djibouti during area visits scheduled for May 2016.

9. My point of contact is (b)(6),(b)(7)(c) can be reached at (202) 433-(b)(6),(b)(7)(c) DSN 288-(b)(6),(b)(7)(c), or via e-mail at (b)(6),(b)(7)(c)@navy.mil.

HERMAN A. SHELANSKI

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