

Office of the Naval Inspector General

OSC DI-12-0428, DI-12-0354, and DI-12-1819
NAVINGEN 201201445

Report of Investigation

ALLEGED SAFETY VIOLATIONS AT NAVAL FACILITIES ENGINEERING
COMMAND (NAVFAC) MID ATLANTIC (MIDLANT)

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Preliminary Statement

1. This report is issued pursuant to an April 20, 2012, Office of Special Counsel (OSC) letter tasking the Secretary of the Navy (SECNAV) to conduct an investigation under 5 USC §1213.
2. OSC is an independent federal agency whose primary mission is to safeguard the merit system by protecting federal employees and applicants from prohibited personnel practices. OSC also serves as a channel for federal workers to make allegations of: violations of law; gross mismanagement or waste of funds; abuse of authority; and a substantial and specific danger to the public health and safety.
3. Reports of investigations conducted pursuant to 5 USC §1213 must include: (1) a summary of the information for which the investigation was initiated; (2) a description of the conduct of the investigation; (3) a summary of any evidence obtained from the investigation; (4) a listing of any violation or apparent violation of law, rule or regulation; and (5) a description of any action taken or planned as a result of the investigation, such as changes in agency rules, regulations or practices, the restoration of employment to an aggrieved employee, disciplinary action, and referral of evidence of criminal violations to the Attorney General.

Information leading to the OSC Tasking

4. The OSC tasking stems from a complaint alleging that, since 2008, employees of Naval Facilities Engineering Command Mid-Atlantic (NAVFAC MIDLANT) violated serious safety procedures placing the employees and other members of the public at risk; and that management officials have failed to ensure compliance with the rules or eliminate the safety risks. OSC identified the three complainants as Messrs. COMP1, COMP2, and COMP3, Electrical Engineering Technicians,

NAVFAC MIDLANT. OSC stated that all three complainants consented to the release of their names.

5. The OSC provided the following summary of the complainants' allegations:

Numerous employees failed to follow standard operating procedures; Employees were unqualified to work on high voltage projects and required training; Employees worked on electrical projects without the proper personal protective equipment; and Management officials failed to ensure compliance with the rules or eliminate unnecessary safety risks.

6. The OSC letter stated the Special Counsel had determined there was a "substantial likelihood that the information provided to OSC by the whistleblowers discloses possible violations of law, rule, or regulation and a substantial and specific danger to public safety."

7. SECNAV referred the OSC April 20, 2012, tasking letter to the Office of the Naval Inspector General (NAVINSGEN) for investigation. NAVINSGEN assigned case number 201201445 in the Navy Inspector General Hotline Tracking System (NIGHTS)¹ to the matter and forwarded the complaint to the Inspector General (IG), Naval Facilities Engineering Command, Headquarters (NAVFACHQ) directing the NAVFAC IG to conduct an investigation.

Description of Naval Facilities Engineering Command

8. The Naval Facilities Engineering Command (NAVFAC) manages the planning, design, construction, contingency engineering, real estate, environmental, and public works support for U.S. Navy shore facilities around the world. NAVFAC is comprised of regional facilities engineering commands, or FECs. The FECs provide the Navy, Marine Corps and other clients with a single center for all NAVFAC public works, engineering and acquisition support to ensure a uniform, enterprise approach to accomplishing its mission.

9. NAVFAC Headquarters, an echelon II command, is located at the Washington Navy Yard, in Washington, DC. There are two Echelon III subordinate NAVFAC commands; NAVFAC Atlantic,

¹ NIGHTS is the Naval Inspector General Hotline Tracking System database used to provide oversight of Department of the Navy complaints of Fraud, Waste, Mismanagement and Abuse within the Inspector General community.

headquartered in Norfolk, Virginia; and NAVFAC Pacific, which is headquartered in Oahu, Hawaii.

10. NAVFAC Mid-Atlantic (MIDLANT) is one of seven FECs and is headquartered in Norfolk, Virginia. NAVFAC MIDLANT reports to NAVFAC Atlantic, and includes Public Works Departments (PWD) at multiple sites: PWD Oceana, PWD Little Creek, PWD Portsmouth, PWD Yorktown, PWD Norfolk, PWD Naval Support Activity (NSA) Norfolk, PWD Pennsylvania and PWD Earle, New Jersey, PWD Maine, PWD Newport and PWD New London.

11. The following are Public Works (PW) services in the Norfolk area: Base Support Vehicles and Equipment (BSVE), which includes Weight Handling Equipment (WHE) operations; Utilities and Energy Management (UEM), comprising the Thermal/Steam Plant operations group; Facilities Maintenance and Sustainment (FM&S), consisting of the NAVFAC Utilities Operations Center (NUOC); Work Reception Dispatch Center (WRDC); Regional Tech Support and Recurring Work groups. The PW department provides public works, public utilities, transportation support, engineering support, environmental support, facilities maintenance, facility contracts, and all other logistic support.

12. NAVFAC MIDLANT PWDs serve as field offices in execution of the NAVFAC safety program. They ensure work and work spaces under their authority maintain compliance with Department of Defense (DoD), Department of the Navy (DoN), federal, state, local, and applicable contract regulations. They monitor the in-house and contractor workforce for safety program performance and compliance and ensure safety and the principles of Operational Risk Management (ORM) are included in all phases of work.

Complainants

13. The complainants are all NAVFAC MIDLANT PW employees. COMP2 and COMP3 both worked as Navy electricians for many years, and currently work in the NAVFAC Utilities Operations Center (NUOC).

14. COMP1 is an experienced high voltage electrician (HVE) who was involved in an electrical accident in 1994 in which he (privacy protected data redacted) and in which a co-worker was killed. He asserts that he (privacy protected data redacted) (privacy protected data redacted) (privacy protected data redacted) (privacy protected data redacted) that (ppdr). From 1998 to 2006, following his (ppdr) and subsequent (ppdr), COMP1 was reassigned from a supervisory position as an HVE and detailed to a number of jobs under an Electrical Engineer Tech position description (PD). During this

period he began to perform Safety Liaison duties, a position management created and allowed him to perform without a change to his PD, as a (privacy protected data redacted).²

15. COMP1 stated during his interview with the NAVFAC Investigating Officer (IO) and in e-mails to the Department of Defense Inspector General (DoD IG) that, from 2006 through 2010, he assumed many of the duties of Safety Liaison and traveled throughout the Mid-Atlantic Region conducting electrical safety training and electrical safety inspections at naval bases. He also assisted in training employees on the NAVFAC Electrical Safe Acts for Employees (ESAFE)³ Standard Operating Procedures (SOPs). In addition, COMP1 stated that he conducted inspections, which he refers to as audits, of the various Public Works Operations centers and was very involved in promoting safety and compliance with SOPs. Employment records indicate that, although he was not officially hired as a Safety Liaison, he was the de facto safety coordinator and was given direction by the Safety Manager and other managers throughout NAVFAC MIDLANT.

16. In March of 2010, Employee 1, a NAVFAC MIDLANT Public Works Manager at Hampton Roads, COMP1's third-level supervisor, requested a fact-finding⁴ to respond to reports of unprofessional conduct (harassing telephone calls containing disparaging comments of NAVFAC employees) in the workplace on the part of COMP1. Employee 1 was also concerned that COMP1 was performing duties that were not included in his position description, nor were those functions traditionally provided by her business line. She was aware that COMP1 had been assigned those duties as an (ppdr), but believed that the duties he was performing were unsupervised and ill-defined.

17. On August 11, 2010, as a result of the fact-finding report, which confirmed Employee 1's concerns that COMP1 was acting in an unprofessional manner, management curtailed COMP1's duties as de-facto safety coordinator; and he returned to the low-voltage work described in his position description.

² This assignment was due to a (ppdr) COMP1.

³ ESAFE is a set of five Standard Operating Procedures (SOPs) for conducting high and low voltage electrical work which were adopted for use throughout the Naval Facilities Engineering Command. See Appendix D.

⁴ A fact-finding is a NAVFAC MIDLANT internal investigation.

As Utilities Electrical Engineer Technician (Low Voltage), he was assigned to work on the piers to assist in providing low voltage power to ships.

18. In late 2010 NAVFAC MIDLANT advertised a recruitment notice to hire a MIDLANT Safety Liaison. This position incorporated many of the duties COMP1 had performed while acting as the de-facto safety coordinator. Both COMP1 and COMP2 applied for this position but neither was selected from the list of 17 candidates.

Description of Conduct of Investigation

19. During the course of this investigation, it was discovered that since 2009, the DON has conducted five investigations, to include this one, into the same and/or similar allegations.

Summary of Previous Investigations

NAVFAC MIDLANT IG INVESTIGATION⁵

20. On April 29, 2010, the NAVFAC MIDLANT IG received a complaint from COMP1 alleging NAVFAC MIDLANT improperly hired contractors to serve as Safety Liaison, which resulted in a waste of taxpayer money; and that employees were hired with insufficient training and experience. A preliminary inquiry into the matter showed that the Position Management Board (PMB)⁶ acted properly in hiring contractors during a time in which a hiring freeze was in place. The inquiry found that of the five NAVFAC contractors named in the complaint, three were part-time, one was hired for short-term position and had resigned, and the remaining position was held by Employee 2, Electrical Safety Program Manager.

21. The PMB found that the three part-time contractor employees provided flexibility in accomplishing the mission, without the cost of three full-time, full-benefits employees. Further, Employee 2, in his position as a full-time contractor, was paid at a rate that was \$2.00 less per hour than a government employee similarly situated.

⁵ NIGHTS Case #201000981.

⁶ Position Management Board is charged with approving contracted support positions for the NAVFAC MIDLANT organization and is designed to address staffing and position alignment throughout its organizational structure.

DoD IG/ CONGRESSMAN WITTMAN INVESTIGATION⁷

22. On July 14, 2010, COMP1 simultaneously filed a whistleblower complaint with the DoD IG and with Virginia Congressman Robert Wittman. In his complaint, COMP1 alleged that NAVFAC MIDLANT had reassigned him because of his continued reports of hazardous safety conditions.⁸ Since the Congressional Inquiry takes precedence and the complaints were identical, the MIDLANT Commanding Officer's Response to the Congressional Inquiry was used to respond to the DoD IG complaint as well.

23. On August 4, 2010, Officer 1, Commanding Officer, NAVFAC MIDLANT, responded to Congressman Wittman concerning the allegations made by COMP1. Specifically, COMP1 alleged that the Safety Program at MIDLANT was ineffective and that his safety inspections found that Norfolk Naval Shipyard (PWD Portsmouth) did not follow SOPs. The response stated that in each case in which COMP1 refers to safety inspection findings, those findings were addressed with PWD Portsmouth supervisors, who took steps to reinforce the requirements to follow SOPs including proper use of personal protective gear, which were issues addressed in the complaint.

24. COMP1 also alleged that two student interns had been injured while performing electrical work due to their failure to comply with SOPs. The NAVFAC MIDLANT response stated that the interns were reassigned and a training stand-down was conducted.⁹

25. COMP1 further alleged that NAVFAC MIDLANT improperly hired contractors who were former NAVFAC MIDLANT employees, instead of promoting him to the position of Safety Manager. The MIDLANT response stated that contract employees comprise less than 3.8% of MIDLANT's workforce and that the specific employee referenced in the complaint, Employee 2, was filling a position that required a unique skill set in electrical safety expertise. Employee 2 was a key player in writing and editing SOPs to comply with National Fire Protection Association's Electrical Safety in the Workplace

⁷ NIGHTS Case #20100238.

⁸ COMP1's Whistleblower allegations were addressed separately and independently outside of the DoN; therefore, this complaint was not included in the five investigations described herein.

⁹ A separate fact-finding was conducted into this incident, resulting in letters of reprimand for the two apprentices involved and their supervisor.

(NFPA 70E) requirements; conducting safety training and managing electrical safety personal protective equipment - experience that made him uniquely qualified.

26. Finally, COMP1 alleged that the NAVFAC MIDLANT IG was indifferent to his concerns. The response stated that contrary to COMP1's distrust of the MIDLANT IG, his complaint was received by the IG on April 29, 2010 and subsequently investigated - a clear indication that the MIDLANT IG and the command took the allegations seriously.

27. Officer 1 stated in his response to Congressman Wittman that safety is a serious matter at NAVFAC MIDLANT, a fundamental core value and the foundation for all that the command does. He stated that he had implemented a number of initiatives to reduce mishaps, such as a Mishap Review Board (MRB), which meets weekly to discuss mishaps and near-misses. Based on the results of mishap investigations, the MRB makes recommendation on improved processes and controls.

NAVFAC CONSOLIDATED SAFETY INVESTIGATION¹⁰

28. Officer 2, Commander NAVFAC Atlantic, posted a blog in April of 2011 on the NAVFAC Portal with the topic "Straight Talk on Keeping Safe." In it, he stressed safety at the workplace and indicated that there were 63 percent fewer days lost from injury in 2011 than in the previous year. COMP1 responded to Officer 2's post, citing his concerns that safety was not afforded the appropriate level of attention and requesting to meet with Officer 2 to elaborate. Officer 2 responded by e-mail inviting COMP1 to meet with the NAVFAC MIDLANT Executive Officer, Safety Director and the Public Works Business Line Electrical Engineer to get "to the heart" of the matter.

29. On May 12, 2011, a meeting was held with Messers. COMP1, COMP3 and COMP2 and NAVFAC MIDLANT's Commanding Officer to discuss the complainants' concerns with regard to the NAVFAC MIDLANT safety posture.

30. On June 9, 2011, Officer 1, NAVFAC MIDLANT Commanding Officer, appointed a team of subject matter experts (SMEs) to conduct a consolidated Safety Investigation.

¹⁰ This is the third of the Command conducted investigations in response to the complainant's previous complaints.

The Investigative team was comprised of NAVFAC Atlantic and MIDLANT Safety Managers; an experienced high voltage electrician and other subject matter experts. The complainants were briefed on the progress of the investigation and were consulted several times to determine the exact nature of their concerns. The Investigative team, with the complainants' input, established a list of 23 items.

31. On June 14th, 24th and 30th, the investigative team met with the complainants to discuss the conduct of the Safety Investigation and provide updates; receive input regarding potential interview questions; and, share comments and suggestions.

32. On August 12, 2011, the investigative team briefed NAVFAC MIDLANT leadership, with regard to the findings of the Safety Investigation.

33. On September 8, 2011, the investigative team briefed the complainants. The complainants' 23 issues of concern were consolidated into seven specific actionable items based on recommendations that coincided with the complainants' issues. The complainants agreed that these items represented their concerns, and the investigative team briefed them and MIDLANT leadership monthly regarding the status of completion. All items have now been addressed by the command and are reported as complete. They are:¹¹

- a. Clarify and improve Lockout/Tagout (LOTO) Inspection process;
- b. Ensure adequate equipment certification and inspection review;
- c. Ensure Proper training;
- d. Evaluate Operations Center capacity to manage simultaneous outages;
- e. Re-establish Electrical Process Teams;
- f. Review high-voltage apprentice training; and
- g. Review current staffing/resources for fall protection.

¹¹ Specific actions taken will be addressed within this report.

34. On September 23, 2011, COMP1 forwarded an e-mail to Officer 2 expressing his dissatisfaction with the results of the NAVFAC MIDLANT Safety Investigation. He stated that he had been informed that he would be allowed to ride along with the investigative team in order to interact with the NAVFAC employees and challenge their knowledge while performing daily tasks.¹² COMP1 felt that it was insufficient to merely question employees and supervisors because they would provide untruthful answers. The complainants requested to meet with Officer 2

35. On October 13, 2011, Officer 2 held a meeting with the complainants at which time he discussed the results of the consolidated Safety Investigation and the pending corrective actions. The complainants agreed that the described course of action was appropriate.

36. On January 6, 2012, following their meeting with Officer 2, the complainants e-mailed him, asking for a meeting with the Commander NAVFAC, Officer 3. The e-mail stated that upon further reflection, they were not satisfied that the pace of implementation was sufficient, and they intended to continue to go up the chain of command to air their concerns.

37. On March 28, 2012, Officer 3 met with the complainants, where he reaffirmed NAVFAC's commitment to safety. At the conclusion of the meeting, the complainants appeared to be convinced that their concerns would be addressed and resolved expeditiously.

CONGRESSIONAL COMPLAINT

38. On July 1, 2011, COMP1 filed a second complaint with Virginia Congressman Robert Wittman, even though all issues were currently under investigation by NAVFAC MIDLANT. COMP1 included the list of 23 items of concern that had previously been generated by the Investigative team and still under investigation, in his complaint to Congressman Wittman. He also stated that he wanted a "safe working place" and to "hire qualified employees, safety manager and safety liaison." COMP1 further stated, "I was the safety manager until they took me out because I brought up unsafe act(s) and lost promotion."

¹² NAVFAC Consolidated Safety Investigation Team Lead, Employee 3 said that he did not recall inviting the complainants to ride along, but that coordinating a time certain to conduct the site-visits proved to be difficult. He said there was no intent to exclude the complainants.

The IO found no evidence of any NAVFAC response to the second congressional complaint.

NAVFAC MIDLANT IG COMPLAINT¹³

39. On October 7, 2011, COMP1 filed another complaint with the NAVFAC MIDLANT Inspector General, alleging that contractors were hired to perform the duties he had previously performed for five years. Because the allegations were identical to those previously filed with the MIDLANT IG and also with Congressman Wittman, the October 7, 2011, NAVFAC MIDLANT IG closed the complaint without further investigation.

CURRENT INVESTIGATION¹⁴

40. On May 16, 2012, the NAVFAC IG commenced this investigation.

41. On May 18, 2012, the investigating officer interviewed the complainants face-to-face. The complainants provided additional information regarding their concerns.

42. The complainants acknowledged that NAVFAC MIDLANT had conducted a Safety Investigation regarding their allegations, but they did not concur with the results of the investigation. They believed that they should have participated on the investigative team personally because they could observe employees in the performance of their daily tasks and ask specific questions on-site that would determine whether the employees were actually familiar with the SOPs. They complained that, rather than conducting on-site visits to the work sites to detect non-compliance, the investigative team merely interviewed supervisors and employees, which the complainants felt, without their participation in the questioning, was insufficient; the complainants felt that the investigative team purposely excluded them. They also felt the corrective action took too long and conditions continued which put others in danger.

43. Complainant COMP1 alleged that after he suffered an electrical mishap in 1994, he was medically reassigned and assumed the duties of safety liaison, conducting training, performing audits, and updating related SOPs for NAVFAC Mid-Atlantic. He alleged that when he conducted audits, no follow-

¹³ NIGHTS Case # 201103167.

¹⁴ NIGHTS Case # 201202445.

up or corrective action was implemented. Audits of NAVFAC Portsmouth's high voltage energy control program¹⁵ consistently demonstrated non-compliance with regulations with no consequence. COMP1 alleged that his 2009 audits found that Portsmouth Public Works personnel consistently failed to do lockout/tagout procedures properly¹⁶ and failed to wear arc flash (fire retardant) clothing¹⁷ as required by the DoD Unified Facilities Criteria (UFC).

44. Complainant COMP1 alleged that since 2010, when he was removed from his de facto duties as the Safety Liaison, the required audits¹⁸ are no longer conducted and safety equipment is not tested as required by law.¹⁹

¹⁵ 29 CFR 1910.147(c)(1) "Energy Control Program." The employer shall establish a program consisting of energy control procedures, employee training and periodic inspections to ensure that before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, startup or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative.

¹⁶29 CFR 1910.147(d) "Application of control." The established procedures for the application of energy control (the lockout or tagout procedures) shall cover the following elements and actions and shall be done in the following sequence: Preparation for shutdown; Machine or equipment shutdown; Machine or equipment isolation; Lockout or Tagout device application, et al.

¹⁷ Department of Defense (DoD) Unified Facilities Criteria (UFC) 3-560-01 §4-4.1. Personal protective equipment (PPE) that provides appropriate arc flash protection is required for all personnel working on or near exposed energized electrical equipment operating at 50 volts or more. These workers shall wear Flame Resistant (FR) shirt (long-sleeve) and pants (or FR coveralls); Cotton or natural fiber underwear (conventional short sleeve t-shirt and briefs/shorts) and leather electrical hazard-rated (EH) work shoes/boots and gloves.

¹⁸ 29 CFR 1910.147(c)(6) "Periodic inspection." The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that procedures and requirements are being followed. The periodic inspection shall be performed by an authorized employee other than the ones(s) utilizing the energy control procedure being inspected. COMP1 refers to the inspections as "audits."

¹⁹ In-service inspection and testing of safety equipment, such as "hot sticks," must conform to the Unified Facilities Criteria (UFC) 3-560-01 Electrical Safety O&M. These items must be tested annually.

45. The complainants stated that high voltage electricians (HVEs) were more inclined to follow lockout/tagout procedures²⁰ and did so more than 90%²¹ of the time, but those low-voltage electricians, especially in maintenance, did not follow the procedures as frequently. The complainants felt that it was difficult to reach the Norfolk Utilities Operations Center (NUOC) because the phone lines were always busy, which likely contributed to the compliance failure. The complainants stressed that management did not enforce procedures nor were there consequences for violations.

46. From May 16 - 25, 2012, the NAVFAC IG Investigating Officer (IO), along with the NAVFAC HQ Safety Manager, interviewed members of the NAVFAC MIDLANT command both in person and by telephone. Additional information was garnered from a 20-question Supervisory Questionnaire,²² which requested specific information regarding the command's safety posture and processes used by the command to ensure compliance. The IO also conducted random direct on-site observations of safety conditions at various work-sites located at NAVFAC PWDs at Naval Station Norfolk and Naval Air Station Oceana.

47. On June 29, 2012, NAVFAC IG provided a draft report to NAVINSGEN. On September 7, 2012 NAVINSGEN returned the report for further analysis and documentary evidence.

48. On October 12th, NAVINSGEN and NAVFAC IG met to discuss the requirement for additional information.

49. On October 18th, 19th and November 6th, 2012, the NAVFAC IO re-interviewed the complainants and NAVFAC MIDLANT Public Works staff; and obtained evidence regarding completion of the seven action items resulting from the NAVFAC MIDLANT Safety Investigation.

50. On November 1, 2012, the NAVFAC IO conducted follow-on interviews with Messrs.COMP1 and COMP2.

²⁰ High Voltage Procedure Steps are contained in the mandatory NAVFAC SOP Public Works Business Line (PWBL) 001 "The Control of Hazardous Energy, Lockout/Tagout Procedures."

²¹ Throughout this report, the complainants site percentages. These are their estimates, and the IO did not identify any specific mechanism from which they were drawn.

²² The survey is provided at Appendix (F) to this report.

Allegations Summary

51. Allegation One: That since 2008, NAVFAC MIDLANT management officials failed to ensure that NAVFAC employees complied with the Standard Operating Procedures PWBL²³.001 and PWBL.007, "The Control of Hazardous Electrical Energy (LOTO)," in violation of 29 CFR 1910.147(d) "Application of control." Substantiated
52. Allegation Two: That, since 2007, NAVFAC MIDLANT management hired and assigned inexperienced employees as high voltage electricians without the requisite skill and training in violation of 29 CFR 1910.332 "Occupational Safety and Health Standards, Electrical, Training." Not Substantiated
53. Allegation Three: That NAVFAC MIDLANT utilities supervisors allowed employees to work on electrical projects without the proper personal protective equipment in violation of Department of Defense(DoD) Unified Facilities Criteria (UFC) 3-560-01 §4. Not Substantiated
54. Allegation Four: That NAVFAC MIDLANT management officials failed to ensure compliance with the safety rules or eliminate unnecessary safety risks in violation of OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual," Chapter 24. Substantiated
55. Allegation Five: That NAVFAC MIDLANT management has failed to take appropriate action to correct widespread and systemic violations of safety procedures in violation of OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual." Not Substantiated

Summary of Evidence Obtained During Investigation

Allegation One

That since 2008, NAVFAC MIDLANT management officials failed to ensure that NAVFAC employees complied with the Standard Operating Procedures PWBL.001 and PWBL.007, The Control of Hazardous Electrical Energy (LOTO) in violation of 29 CFR 1910.147(d) Application of control.

²³ Public Works Business Line publications.

Findings

56. Messrs.COMP1, COMP2, and COMP3 alleged that since 2008, they have continuously reported numerous safety concerns and violations that were repeatedly ignored by management officials.²⁴ Specifically, the complainants allege that employees failed to follow the SOPs, which include Lock Out/Tag Out (LOTO)²⁵ procedures and other applicable rules for high voltage work. In their complaint to OSC, the complainants also allege that the SOP for Mechanical Lock out/Tag out²⁶ procedures has not been implemented despite being approved by NAVFAC leadership. Both SOPs define safety rules necessary to protect workers while conducting high voltage electrical work.

LOTO SOP

57. NAVFAC established the Electrical Safe Acts for Employees (ESAFE) PWBL.001, to provide policy and guidance for obtaining, placing, and removing electrical lockout/tagout devices, testing for no voltage, and installing and removing temporary protective grounds. The SOP states that circuits and/or equipment are considered energized unless the following steps have been taken to establish an electrically safe work condition:

- a. All energy sources have been identified and isolated;
- b. All energy-isolating devices have been red danger locked and tagged;
- c. Conductors and/or equipment have been tested for no voltage;
- d. Conductors and/or equipment have been grounded; and
- e. Affected employees have been notified.

58. This procedure establishes the minimum requirements to establish an electrically safe work condition while performing

²⁴ The investigator chose to examine the complainants' allegations as submitted rather than combining them based on their similar nature.

²⁵ LOTO addresses the practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy (electrocution) while employees perform servicing and maintenance activities. LOTO rules are included in NAVFAC SOPs.

²⁶ Referred to by the complainants in the OSC letter as "Steam Pressure SOP."

service, maintenance, repairs or installation on electrical systems operating at voltages of greater than 50 volts. However, it does not apply to contractors.

59. A review of COMP1's Naval Shipyard Portsmouth, Virginia Inspections records for 2007, 2008 and 2009 revealed that employees failed to follow some aspects of the SOPs. In his inspections, he found numerous instances when HVEs failed to correctly complete switching orders.

60. There are a series of steps required before an employee can be cleared to commence working on an electrical project. After receipt of a work order for an electrical project, an electrician must contact the NUOC²⁷ and submit a switching order to open or close circuits to ensure worker safety. Switching orders are required for all electrical projects involving more than 600 volts.

61. Switching orders are similar to a plan of action for a particular electrical project. The document is required to identify all applicable energy sources and those that have been marked or tagged²⁸. The switching order must be reviewed by the foreman and the rest of the work crew so that all employees are aware of how to proceed. Electricians place themselves and others at risk when they fail to submit switching orders or inform the NUOC about their high-voltage projects.

62. A switching order is prepared by an Authorized Official (AO) who has been so designated by supervisors based upon that individual's experience and knowledge. In order to be designated as an AO, an individual must be cognizant of the purpose and functions of the energy control program and must have acquired the knowledge and skills required for the safe

²⁷ NAVFAC Utilities Operations Center operates 24/7 as a central point of contact where all utility drawings; SOPs; tags and locks; tag logs and lists of individuals authorized to perform certain tasks are maintained. The NUOC also manages outage requests and directs the implementation of switching orders.

²⁸ Energy sources are tagged with either yellow or red tags to indicate the status of the equipment. Yellow tags indicate the equipment is defective and should not be energized until the yellow caution lock is removed. Serialized Red tags indicate the equipment is actively undergoing servicing, maintenance, repair or installation by an employee who could be injured if the equipment is operated. A lock, red or yellow, is placed on an energy-isolating device to ensure the equipment being controlled cannot be energized or operated until the lock is removed.

application of energy controls. A list of AOs must be maintained at the NUOC to verify that the individual preparing the switching order meets the appropriate criteria.

63. The completed switching order must contain specific details regarding the device to be opened or closed; specifics regarding the placement of tags and locks; clearly readable line diagrams; voltage of circuits or equipment to be de-energized; any special hazardous condition at the work site, and a job briefing sheet. Once the work is complete, the release sheet documents that all personnel, tools, and equipment are in the clear.

64. In developing the switching order, the AO must work in tandem with individuals at the NUOC to make sure the planned outage does not conflict with other ongoing projects. The NUOC issues serialized tags to workers who place the tags, along with locks, to prevent the equipment from being energized during the repair process. Tags are assigned to a particular piece of equipment and an electronic log of the tags is maintained at the NUOC.

65. The complainants reported specific examples of failure to follow SOP:

a. March 10, 2009, report that a co-worker had replaced an electrical device without using the LOTO process;

b. May 1, 2009, and September 2, 2009, report that high-voltage duty electricians did not contact the NUOC at the start of their work shifts;

c. January 8, 2010, report of an employee changing a fluorescent light ballast while still energized; and

d. May 7, 2011, e-mail to MIDLANT leadership, described an incident at Bldg. 199 Dam Neck Virginia, concerning a failure to properly tag out.²⁹

66. The complainants allege that management officials failed to ensure compliance with the SOP and took no remedial action when notified.

²⁹ This issue was investigated as one of the 23 "items of concern" during the NAVFAC MIDLANT Safety Investigation that concluded the procedure was executed properly and the allegation was unfounded.

67. Employee 4 , NAVFAC MIDLANT supervisor, was interviewed by the NAVFAC IG and stated that he had some recollection of employees not following proper LOTO and/or switching order procedures. He stated that he did not document the issue, but at each occurrence would contact the appropriate manager and inform them of the violation. He would then consider action complete.

68. The complainants reported to OSC that there are more than 200 employees required to follow LOTO rules, but only about 5%³⁰ adhere to the appropriate procedures; however, the complainants subsequently clarified to the NAVFAC IG investigator during a May 18, 2012, interview that high voltage electricians follow these procedures about 90% of the time. They alleged low voltage electricians follow these procedures only about 50% of the time.

High Voltage Apprentice SOP Violations³¹

69. In November 2009, COMP1 reported in an e-mail to the DoD IG that, an apprentice electrician was injured at the Norfolk Naval Shipyard in Portsmouth, Virginia, while performing an electrical project without his mentor present. The Safety Investigation into the events surrounding the apprentice electrician's injury revealed that on November 21, 2009, Employee 5 , Supervisory HVE, directed Messer's Employee 6 and Employee 7 , HVE apprentices, to remove spare parts from an unused generator and let him know when that task was complete. The spare parts were to be used to repair a transformer that had been damaged in the Nor'easter that had occurred the previous weekend in Norfolk, and had resulted in loss of power to three buildings.

70. According to the Investigative report of the incident, the two apprentices successfully removed the spare parts, but did not call their supervisor, Employee 5 , who at that time was at another location, to inform him the apprentices went to the work location to repair the transformer, and instead of waiting for their supervisor to arrive, began the work themselves. They did not call the NUOC to inform them they were working on the transformer and failed to ascertain whether the transformer was

³⁰ Percentages cited in this paragraph are estimates of the complainants, they have not been validated.

³¹ The facts discussed in this section also apply to allegation five.

de-energized. No switching order was prepared and the result was that the two apprentices worked on a live transformer. Employee 6 was badly shocked, received minor burns on his arm and leg, and missed one day from work.

71. Records indicate that in response to the apprentice's failure to follow established SOP, management removed all apprentices from Portsmouth, retrained them on appropriate LOTO measures, and issued a "no exception" directive with regard to apprentices working on projects without a mentor/supervisor presence. The command conducted a safety stand-down where all apprentices received additional safety training. In addition, both of the apprentices involved as well as their supervisor received letters of caution for failure to follow the appropriate SOP.

72. Documents provided by the MIDLANT Human Resources Office (HRO) and the safety team detailed specific management responses to other reported SOP violations:

a. On February 15, 2010, an Electrical Power Controller at NAVFAC MIDLANT was cited for failure to use LOTO procedures properly, when he failed to call the NUOC prior to executing switching orders. He was issued a Letter of Reprimand.

b. On July 22, 2010, a NAVFAC MIDLANT Industrial Equipment Mechanic received a Letter of Reprimand for failure to follow LOTO procedures. He was replacing a circulating pump and did not attach the appropriate red tag and lock to the power leading to the pump to indicate the equipment was being repaired.

73. There are other documented instances when various Public Works Field Offices failed to follow SOPs with regard to LOTO procedures. The following are specific comments taken from the 2011 annual Hampton Roads³² Inspection reports of switching orders and LOTO at the NUOC:

- a. There is no record/ documentation that the supervisors are performing periodic inspections.
Recommendation - Supervisor needs to annotate these periodic inspections in the log book or by using the checklist in Ref (B)³³ and maintaining a file.

³² Navy activities in the greater Norfolk, Virginia area.

³³ Ref (b) refers to the Checklist used to inspect the logs maintained at the NUOC. It is contained in the ESAFE PWBL SAFE 01.

- b. Serial #'s B7-0008-1, B7-0008-2 Yellow caution tag not filled out correctly, missing work center, Code, phone number.

Recommendation - Supervisor needs to review on a routine basis active LOTO tags on machinery to ensure that they are filled out correctly and take action to have them corrected.

- c. Serial #'s 24271 thru 24281 - there were no entries for date and time tags were placed; 25666 thru 25669 - there are no entries, just serial numbers; 25677 thru 25678 - there are no authorized official signature for approval; 25750 Same as above; 25769 thru 25780 - there were no date time for removal (cleared) of tags; 25981 thru- 25987 - there are no authorized official signature for approval

Recommendation - Supervisors / Work leaders ensure corrections are made in the log book and review all current active LOTO point of isolations entries for their accuracy. Ensure all qualified personnel filled out log book entry with the required information and that it is verified by the Authorizing Official with his signature.

74. COMPl stated in his interview with the NAVFAC IO that he conducted Inspections from 2007 until his reassignment in 2010. He specifically noted that Portsmouth audits, dated September, 24, 2008, and October 22, 2009, found that switching orders were not being completed as required by SOP. A 2010 inspection by Employee 2 also found a lack of adherence to SOP:

Authorized Utilities Switch Operator (AUSO) did not have records at the NUOC demonstrating his qualifications; NAVFAC employees were observed wearing the incorrect class safety gloves; safety gloves were not timely inspected; switching orders were incomplete; Authorized Official listed on red danger tag was not designated as an AO on the NUOC list.

75. On October 19, 2012, the NAVFAC IO interviewed Witness 1, MIDLANT, Public Works Business Line Coordinator at MIDLANT. She stated that NAVFAC MIDLANT has taken aggressive steps to improve its safety posture and ensure compliance with SOPs. Specifically, in 2010 she established the Programs and Business Management (PW-1) section of the Public Works Business line

(PWBL) based on her sense that she needed greater focus on safety, process improvement, community management and resourcing - even before the results of the NAVFAC MIDLANT Safety Investigation revealed weakness in those areas.

76. Witness 1 described her rationale for including Safety Program Improvement as part of PW-1. She stated that NAVFAC MIDLANT, with over 2100 positions, \$200M in labor resources and more than 50 job series, has a huge number of in-house industrial trade positions that require proactive management of safety training and development of safety SOPs. She stated that PW1 is committed to ensuring that a consistent approach to training, community development and workforce safety is employed.

77. Witness 1 stated that she led efforts to update the ESAFE PWBL.001 (Revision C) SOP to provide clarity and improve compliance. The revised SOP, completed and approved by management, but currently under union review, will define the roles and responsibilities of NUOC personnel; add new definitions to Qualified Persons Lists that are more easily understood and maintained; centralize the electronic tag log so that all NUOCs will share a common log; modify the inspection process for high and low voltage; require NUOC supervisors to inspect active tags to ensure they are not left on equipment an inordinate amount of time; and, increase involvement of the Operations Officer in the Inspection follow-up process.

78. Witness 2, PW12 Supervisor, stated in an interview with the IO on November 5th, that her group is responsible for training employees annually on ESAFE SOP, but that supervisors have the ultimate responsibility to ensure SOP guidelines are followed consistently. Her section employs three safety liaison personnel who provide annual LOTO, ESAFE, fall protection and Electrical and Mechanical SOP Training. She stated that her employees teach at all PWD sites on the East Coast, from Norfolk to Maine. Attendance at LOTO training is tracked using the Enterprise Safety Management System (ESAMS).

79. In their complaint to OSC, the complainants also refer to the Steam Pressure SOP, more accurately titled, "The Control of Hazardous Mechanical Energy Lockout/Tagout, PWBL.007." The

topic of the Mechanical SOP was the subject of a fact-finding³⁴ investigation when COMP1 reported this issue to management.

80. Employee 8, Occupational Health and Safety Specialist, conducted the fact-finding. According to the report, "Standard Operating Procedure Number PWBL.007 "The Control of Hazardous Mechanical Energy Lockout/Tagout (LO/TO)" was finalized on 14 May 2010. Public Works Business Line Program Safety Liaison, Employee 9, began training affected MIDLANT employees in June 2010. As there were union concerns with the associated SOP's PowerPoint presentation, training was temporarily suspended, then restarted in April 2011.

81. According to Witness 1, this SOP is still under local union review. Although the union does not have the ability to affect safety-related policy, the union may comment on its implementation. Efforts are ongoing to finalize the SOP and plan for training and implementation.

82. On May 12, 2011, September 5, 2011, and October 19, 2011, the complainants forwarded joint e-mails to management, Officer 4, then Executive Officer at MIDLANT; Officer 1, Commanding Officer, MIDLANT; and Officer 2, Commanding Officer of NAVFAC Atlantic expressing their dissatisfaction with the progress of the Safety Investigation that was being conducted. These communications resulted in face-to-face meetings with management officials and helped shape the scope of the MIDLANT Safety Investigation.

Ship-to-Shore SOP

83. A separate issue emerged during the course of this investigation which was not reported to OSC. On August 30, 2010, COMP1 reported to management via e-mail that a potentially dangerous situation could occur if electricians were not trained on the new ship-to-shore SOPs PWBL.005 and PWBL.006 "Volt Ship Connect." Electrical shore facilities provide dockside electrical service to ships berthed at the facility. NAVFAC is responsible for providing the shore power cables to the ship. The ship's electrical officer is in charge of providing cable connections to the ship's electrical bus.

³⁴ A fact-finding is a NAVFAC internal investigation which is required whenever there is a report that an unsafe or unhealthful situation has occurred.

84. There are conflicting instructions between NAVFAC ESAFE and the Fleet³⁵ regarding training, the use of personal protective equipment (PPE); use of testing instruments, and the use of tags and locks when connecting power to the ships. These issues must be resolved before the new NAVFAC ship-to-shore SOP can be implemented. The NAVFAC Safety Manager reported on November 21, 2012, to the NAVFAC IG that the corrective action, including SOP revision and training of affected MIDLANT employees, is to be fully implemented by February 28, 2013.

85. In an October 19, 2012, interview with the NAVFAC IO, Witness 3, Utilities Superintendent, stated that existing SOPs provide safe operating procedures for ship-to-shore electrical safety and thus mitigate the risk until the new SOPs are implemented. Current MIDLANT SOP 600 EH.015; 600 EH.16 and 600EH.017 cover ship-to-shore power procedures.

Regulations

86. 29 CFR 1910.147 "Occupational Safety and Health Standards, Control of Hazardous Energy (lockout/tagout)" provides:

a. The employer shall establish a program consisting of energy control procedures, employee training and periodic inspections to ensure that before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, startup or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative;

b. Standard Operating Procedures PWBL.001 "The Control of Hazardous Electrical Energy (LOTO)" implement the mandates in 29 CFR 1910.147.

Discussion and Analysis

87. The complainants and other employees reported violations of the NAVFAC LOTO process, noncompliance with ESAFE SOPs, and the perception that no one is held accountable. Most violations occurred due to failure to complete switching orders; failure to list appropriate data in the serialized tags; failure to ensure that accurate lists of qualified individuals are maintained as required in the NUOC.

³⁵ Naval Surface Force, U.S. Atlantic Fleet (COMNAVFLANT) has cognizance over provision of electrical power to surface ships.

88. There is no doubt that there were lapses in compliance; however, the IO was able to verify that in many instances, violations resulted in corrective action. But because of the considerable lapse of time, lack of documentation, second-or third-hand reporting of incidents without first-hand knowledge or on-site experience and the fact that some employees are no longer employed at NAVFAC MIDLANT, many of the specific issues identified in the OSC complaint were difficult to confirm.

89. NAVFAC ESAFE SOP states that when there are violations, supervisors should take corrective action and consider factors such as the seriousness and frequency of the offense. There is no specific guidance or policy to identify what corrective action must be taken. The possible consequences range from verbal warnings to dismissal. The NAVFAC IO determined that most supervisors issue verbal warnings when they are made aware of SOP violations and, depending on the severity or frequency of the violation, punitive letters and other measures are also used to ensure accountability.

90. NAVFAC management officials and supervisors expressed the common opinion that it is the supervisor's role to ensure compliance once the employee is trained on the SOP. However, without supervisor's daily review of documents, on-site inspections, and follow-up with consequences, it is unlikely that the expectation for zero tolerance will be met. Although management has made progress to improve compliance, accountability continues to be a problem.

91. PWBL PW-1 modification of the SOP includes more frequent inspections and inclusion of the Operations Officer in the oversight, which should result in more consistent and comprehensive compliance.

92. With regard to the Ship-to-Shore SOP, the NAVFAC Safety Manager reported on November 21, 2012, to the NAVFAC IG that the corrective action, including SOP revision and training of affected MIDLANT employees, is to be fully implemented by February 28, 2013.

93. The Mechanical SOP has been finalized and training will commence after local union review of it (union focus is on the SOP implementation procedures).

94. During their interview with the NAVFAC IO, the complainants recommended that on-site observations would be an appropriate way to verify whether SOPs were being followed. The complainants communicated that they had a lingering doubt that

the NAVFAC Safety Investigation Team response to their reports of safety violations was adequate because there were no random on-site visits made during any of the previous investigations. At the complainants' suggestion, the IO made an unannounced site visit to Naval Station Norfolk Pier 11S to observe a high voltage job on October 19, 2012. Two HVEs were on the job site, reviewing the switching order and preparing to call the NUOC before testing voltage in the switchgear. The primary HV electrician about to perform the job was wearing full PPE. He called NUOC using his command-issued cell phone and waited less than a minute while the NUOC operator completed another call. The IO was accompanied by the NAVFAC HQ IG, HQ Safety Manager, Witness 3, Utilities Superintendent, as well as other supervisors who confirmed that the switching orders were complete and the procedures used by the HV electricians were correct. The electricians stated to the IO that they were familiar with existing SOPs, were following the process, and understood the hazards and safety precautions required.

Conclusion

95. The allegation that since 2008, NAVFAC MIDLANT management officials failed to ensure that NAVFAC employees comply with the Standard Operating Procedures PWBL.001 The Control of Hazardous Electrical Energy (LOTO), in violation of 29 CFR 1910.147(d) Application of control is Substantiated.

Recommendations

96. That PWBL finalize PWBL.001 SOP (Revision "C") of the ESAFE SOP to include the requirement that two inspections are conducted each year at the NUOC and other operations centers; that inspection results be transmitted to the Operations Officer, who will verify that corrective action is taken when violations occur.

97. That supervisors act more aggressively to ensure employee compliance by monitoring switching orders daily; increasing the frequency of work site-visits; documenting non-compliance, and following-up with appropriate action.

98. That all actions, both ongoing and based on recommendations herein, be tracked to completion by the MIDLANT Safety Program Manager and reported monthly until complete to Commander, NAVFAC, via the LANT and HQ Operations Officers.

99. That MIDLANT conduct a review six months after this report is published and report on the implementation status of

procedures to Commander, NAVFAC, via the LANT and HQ Operations Officers.

100. That NAVFAC HQ Safety coordinate and provide a safety review by external subject matter experts to evaluate MIDLANT's Safety Program, particularly as it pertains to the issues and concerns raised by the complainants.³⁶

Actions Planned or Taken

101. NAVFAC MIDLANT management has completed a review of roles and responsibilities of NUOC personnel and supervisors. Plans are underway to enhance the supervisor's role in using the performance assessment process and tools to validate and enforce compliance. A supervisor safety stand down was held on October 19, 2012, that included a presentation from the Human Resources Office with regard to the options available for violation of SOP or other infractions.

102. MIDLANT Safety Office and PW-1 have revised the PWBL.001 SOP ("Revision C") to address the lack of accountability and follow-up. The SOP is expected to be implemented by January 2013, pending union review and MIDLANT Command endorsement; however, certain aspects of the SOP have already been put into action, including implementation of a centralized qualified persons list which can be generated and updated electronically.

103. The revised PWBL.001 SOP includes specific responsibilities for supervisors and management to ensure the minimum requirements for LOTO of electrical energy sources are met. Revision C of the SOP incorporates revised definitions of "qualified persons;" provides inspection checklists and procedures; and, more clearly defines the roles and responsibilities of NUOC staff.

104. PWBL staff, in conjunction with personnel specialists, have developed and implemented in the first quarter of FY13 supervisor training to educate supervisors on the full spectrum of punitive and non-punitive corrective measures; from on-the-spot correction through training and formal counseling to dismissal, based on the frequency and severity of infractions.

105. MIDLANT established regular safety meetings and forums, to include daily work center "5-minute safety stand-up" meetings,

³⁶ The external review began on November 26, 2012.

weekly or semi-monthly work center safety meetings; Weekly Mishap Review Boards, Quarterly Mishap Review Boards, Annual Supervisor Safety Stand-Down, as well as Supervisor Safety Committee and Employee Driven Safety Committee meetings.

106. NAVFAC is revising the ESAFE Ship-to-Shore SOP to resolve inconsistencies with associated COMNAVSURFLANT SOPs with an expected implementation date of February 28th, 2013.

Personnel Action Taken

107. No personnel action was taken as a result of the investigation into this allegation.

Allegation Two

That, since 2007, NAVFAC MIDLANT management hired and assigned inexperienced employees as high voltage electricians³⁷ without the requisite skill and training in violation of 29 CFR 1910.332 Occupational Safety and Health Standards, Electrical, Training

Findings

108. In their earlier complaint to DoD IG, NAVFAC IG and Congressman Wittman, the complainants alleged that NAVFAC MIDLANT allowed apprentices and employees to perform high voltage work without being properly trained, or had been hired without the requisite skills and allowed to perform high voltage electrical work. When interviewed about the source of their information, the complainants stated they either overheard or received anecdotal information from fellow employees to formulate these opinions.

109. Specifically, in a March 19, 2009 e-mail to Witness 3, NAVFAC MIDLANT Utilities Superintendent, and Employee 10, HV Supervisor, COMP2 expressed his concern over the hiring of Employee 11, a new employee whom COMP2 felt was not experienced enough to be placed into a HV duty electrician³⁸ position.

³⁷ High voltage electricians must test, repair, and maintain electrical systems. They are skilled in the maintenance of overhead, underground, power plants and other central electrical systems and must have a thorough knowledge of maintaining electrical systems with charges above 600 volts.

³⁸ The duty electrician is a position which requires extensive knowledge of all MIDLANT electrical systems and utilities processes. When the NUOC receives a call after normal hours, the duty electrician is the expert who is expected to respond to emergency or critical situations.

Witness 3's e-mail response to COMP2 on April 17, 2009, stated:

Management understands there are areas where additional training will be required before a new employee is placed in a full time duty status. We are in the process of working him on the duty now along with an experienced duty HVE and that will continue until we feel comfortable with his knowledge of the system and operational capability. We would not place anyone in a position to injure himself or fellow employee and our intent is to ensure when he assumes the duty electrician shift he will be capable of performing safely. A plan is in place to make that happen and any new duty person goes through it. His is more extensive because he is new to this electrical distribution system and our operational requirements.

110. Witness 3 was interviewed on May 18, 2012, and reiterated that Employee 11 had to undergo extensive on the job training in order to become a competent HV duty electrician. He stated that likewise, most new employees are not allowed to work on high voltage projects independently until they are competent to do so. Witness 3 said that employee competency is evaluated by direct observation; initially placing new hires with experienced electricians and assigning employees to work independently only when fully qualified. According to Witness 3, no supervisor would put the unqualified employee or others at risk by assigning someone to do a job in which he or she lacks competence acquired through training, existing experience and mentorship. Once competency is established, the employee is then allowed to work on high-voltage projects.

111. The complainants also made reports regarding the competence of Employee 12 to function as a Utilities Supervisor at Oceana PWD without high voltage experience. Employee 13, PWD Oceana Production Director, explained that Utilities supervisors at small PWDs such as Oceana are required to supervise all commodity areas³⁹ and cannot be expected to have expertise in each commodity. Supervisors are required to be familiar with SOPs and monitor performance, not perform the work. Employee 11 also stated that Employee 12 has highly

³⁹ Utilities Division includes water, sewer, electrical and other electrical services.

skilled experienced high voltage electricians who work for him who provide specific input for related issues.

112. Other employees specifically addressed by the complainants are Employee 14 , Employee 15 , and Employee 16 ⁴⁰, all of whom were hired as high voltage electricians yet lacked the requisite skills when initially hired. As stated above, even though the employees may have been hired to perform as HV electricians or mechanics, they still went through on-the-job training as required to obtain full competence in the unique MIDLANT utility systems before working independently.

113. Because high voltage electrical work is inherently dangerous, federal rules dictate specific sets of procedures that workers must learn to prevent injury or death resulting from employee contact with high voltage electric circuits. These procedures are mandated by 29 CFR 1910.332 "Occupational Safety and Health Standards, Electrical, Training," that states that "those permitted to work on or near exposed energized parts shall, at a minimum, be trained in and familiar with the skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment; the skills and techniques necessary to determine the nominal voltage of exposed live parts, and the clearance distances and the corresponding voltages to which the qualified person will be exposed."

114. Further, the regulation states that "the training required by this section shall be of the classroom or on-the-job type the degree of training provided shall be determined by the risk to the employee."

115. NAVFAC SOP PWBL.003 The Control of Hazardous Electrical Energy, requires that employees be trained to ensure they understand the purpose and function of the energy control program and acquire the knowledge and skills related to the safe application, usage, and removal of energy controls. These skills are acquired through classroom training, mentorship, and experience.

116. Witness 4 , MIDLANT PWBL Supervisor, stated that the skills and knowledge required to perform high voltage work are not abundantly available. According to Witness 4, the idiosyncrasies of the Navy systems and procedures make it very

⁴⁰ Employee 16 worked for MIDLANT at the time of the allegations, but is no longer employed by NAVFAC.

difficult to find employees that have all the skills and abilities that are required. He stated that there is no test, license, or certification for high voltage electricians.

117. Witness 4 further stated that MIDLANT has ongoing risk mitigating initiatives to take into account the fact that all employees may not have the breadth of knowledge required to perform the tasks associated with the highly specialized HV work. He stressed that by putting these initiatives in place the employees are not exposed to all the hazards of the traditional HV electrical work. These initiatives include:

a. Not permitting hot work. No high voltage electrician is permitted to work on energized equipment. This substantially reduces the complexity and risk involved with the work required on these systems;

b. Requiring an approved written procedure to perform switching;

c. Mandating annual training of LOTO;

d. Continuously communicating with the NUOC during switching; and,

e. Before being allowed to perform work, ensuring the name of the authorized employee is on the AO list at the NUOC.

118. On May 18, 2012, the IO interviewed Witness 5, Utilities Energy and Maintenance Product Line Coordinator at MIDLANT, who is responsible for developing the community management plan for skilled trade employees. Witness 5 stated that the process for hiring skilled labor involves capturing core competencies of at least 60-70% of what the position requires. When a vacancy is announced and a certificate of candidates is provided to hiring officials, they review the resumes and use a scale from 0 to 100 to rank them. If the applicant is a compensable disabled veteran he or she only has to be minimally qualified. If the minimally qualified veteran is NOT selected, the rationale for non-selection must be reported within 60-90 days.

119. Witness 5 provided an example:

An applicant for a high voltage electrician vacancy at Oceana PWD worked on runway lights and worked on aircraft in the Air Force. This type of work is considered high voltage to airmen, but in Utilities it

is low voltage. However, the applicant met the minimal requirement as a veteran and was offered the position.

120. Witness 5 stated that her team at PW-1 has established standard interview questions for use in hiring skilled labor; and implemented regular skill testing for apprentices. She further stated that core competencies are managed by individual supervisors and the one-year probationary period provides ample opportunity to remove a non-performing employee.

121. The 2011 NAVFAC Safety Investigation found that prior to 2009, practices at NAVFAC MIDLANT allowed applicants to be hired without being interviewed and without supervisor or subject matter expert input. The result was that on occasion the selecting official may have hired unqualified workers. The new procedure requires supervisors to be engaged in the hiring process and to evaluate the resumes based on their own expertise and experience.⁴¹

122. The complainants also allege that employees do not receive adequate lockout/tagout training, which would pose a considerable safety risk to themselves and to others. Both Federal regulations as well as NAVFAC policy require that employees receive lockout/tagout training at least annually and that the training be documented and recorded.

123. The NAVFAC MIDLANT Safety Investigation of June 11, 2011, summarized interviews with 33 employees and supervisors who all reported attending LOTO training, either in a classroom setting, via video or by their supervisor. A recently developed "hands on" LOTO training class using an electrical mock-up provides another training opportunity for the workforce.

⁴¹ In their current complaint, the complainants raise an October 2011 meeting in which the MIDLANT CO and XO as well as Officer 2, Commander NAVFAC Atlantic, agreed that NAVFAC had problems hiring inexperienced electricians in the past, when no supervisors or Subject Matter Experts (SMEs) were included in the hiring process. This issue was investigated by the NAVFAC MIDLANT Safety Investigation, which concluded that on occasion individuals who met basic skill qualifications were hired based solely on the content of their resumes, but lacked the expertise required to fully perform HV electrical tasks. The Investigative Team, however, found that even if they were hired without the requisite skills, employees had to undergo on-the-job training, additional classroom training and be found by their supervisors to be competent before being assigned to work on HV electrical projects.

124. On October 18, 2012, the IO interviewed MIDLANT Public Works supervisor Witness 2, provided the list of individuals who were required, and had received ESAFE SOP, LOTO, fall protection and CPR training. All training for those who are required to receive annual training was certified by Witness 2 as complete. Witness 2 stated that training is conducted by her employees, who routinely enter the names of all individuals undergoing training into ESAMS. She stated that safety training has been conducted at least annually for all employees engaged in high and low voltage work since 2010.

125. In addition to LOTO training, specialized high voltage training is provided by AVO⁴², an industry contractor. The training is designed to provide industrial-level interface, enhance safety application, and increase awareness for high voltage operations and distribution maintenance. This training is provided at least bi-annually and is available for new and established HV electricians.

126. The Enterprise Safety Management System (ESAMS) is a web-based safety management system that has allowed NAVFAC to standardize Safety and Occupational Health (SOH) mishap, training, medical monitoring, and facility deficiency data. The Training & Requirements Management System (TRMS), a key module of ESAMS, contains a central management area for employees, supervisors, and training coordinators to manage and review training requirements, training history and submit electronic completion of training requirements. TRMS allows personnel to identify roles that require training and links employees to these roles and subsequent training. Retrain dates are automatically generated by TRMS, and periodic e-mails are sent to employees and supervisors to alert them of upcoming requirements.

127. Witness 2 stated that all the components of the TRMS module are not yet available to NAVFAC MIDLANT and that only

⁴² Training provided by contractor, AVO: **Basic Electrical Troubleshooting:** Learning objectives are to understand safety issues of troubleshooting electrical systems and components, use meters and miscellaneous test equipment, understand basic troubleshooting techniques, troubleshoot specific equipment, and recognize power quality problems. **Sub-Station Basic I:** Learning objectives are to explain safety requirements in a substation, perform maintenance and testing on air, oil, and vacuum circuit breakers, perform maintenance on switching gear, perform battery testing, understand basic over current and voltage protective relay concepts, and analyze test results.

basic skills such as SAFE SOP, LOTO, fall protection and CPR are tracked within ESAMS. Supervisors use stand-alone spreadsheets or sign-in sheets to record attendance at other types of specialized skill training. These spreadsheets or sign-in sheets are not kept by the individual supervisors in an organized fashion. They could be in a folder in a desk drawer or in a computer file and were not readily available for review. Thus, specific specialized high voltage training that would document each employees' follow-on training and certifications, cannot be verified.

128. The complainants also reported that in 2007 apprentices had been allowed to work without supervision on high-voltage projects and received inadequate training and mentorship in violation of the PWBL.0001 SOP. Management confirmed that the apprenticeship program at that time was inadequate to ensure that apprentices received proper training and mentorship;⁴³ however, existing NAVFAC policy dictated that apprentices were not allowed to work independently without an experienced worker. To improve the command's ability to provide an adequate pool from which to expand its workforce, NAVFAC MIDLANT implemented NAVFACINST 12410.2 "Apprenticeship Program" in August of 2010. This program is a four-year Student Career Experience Program, (SCEP) that is designed to attract students to the federal public service. Students are taken through a vigorous training program combining academics, trade theory, and on-the-job experience to become skilled journeymen.

129. The Apprentice Program is managed by Witness 6 at NAVFAC MIDLANT. The program provides students with academic training required for their trade, resulting in a "Certificate of Completion." All academics for the certificate program are given during non-working hours at the Tidewater Community College (TCC) campus. All on-the-job learning is held during working hours. The apprentice earns a competitive wage while advancing to the journeymen level following a planned progressive training program. All academic tuition and book costs are paid by NAVFAC MIDLANT provided the student receives a grade of "C" or better in the course work pursued. Apprentices are employed at the pay rate of WG-2 and receive promotions upon successful completion of program requirements.⁴⁴ Upon graduation,

⁴³ Facts pertaining to intern training are also discussed in allegation 1.

⁴⁴ The evaluation referenced by Witness 3 is a qualitative review by the employee's first- and second-level supervisor.

apprentices convert to the journeyman level of their trade, in most cases WG-10.

130. In the course of this investigation, the IO requested an interview with two randomly selected High Voltage Electrical Apprentices. Employee 17 was interviewed on October 18, 2012, and stated that he began the Apprentice Program in December 2008 and will "graduate" in December 2012. In describing the program, Employee 17 stated that the requirements include about 8,000 hours of On-the-Job Training (OJT) over a four-year period, with rotations to different PWDs within NAVFAC MIDLANT. He was also required to maintain a "C" average at Tidewater Community College in courses that ranged from electrical wiring to an accredited associates degree program paid for by the command.

131. Employee 17 stated that when apprentices are approximately 75% through the program, they are allowed to work under the supervision of a mentor, not simply watch or help. His familiarity with SOPs came with daily safety briefs at the work center; formal weekly safety training, and by reading the applicable SOP as required prior to going to every job.

132. Employee 17 felt that the process to execute switching orders is better defined than it was prior to 2010 and has become easier to follow. He described his experience with a switching order he had worked the morning of the interview. He said "there were 16-steps, I had to call NUOC for each step. NUOC logs time for each call/action. Took about 90 minutes to complete." Employee 17 felt that delays amounted up to several minutes per call due to being on hold or having to explain steps to the NUOC operator. At most he waited 5-7 minutes on hold before talking with NUOC operator due to others calling in at the same time. The particular job had eight Red Tags associated with isolating equipment.

133. Another High Voltage Electrician Apprentice, Employee 22, also at NAVFAC MIDLANT was interviewed on October 18, 2012. Employee 22 stated that he started the Apprenticeship Program in December of 2010 and will complete the program in December of 2014. He described applying for the program online and being interviewed multiple times before being selected.

134. Employee 22 stated the initial two or three weeks of his apprenticeship included safety training videos and SOP familiarization. He stated that he was then assigned to a PWD and a mentor. According to Employee 22, apprentices are told that at any time, an employee may decline to do specific work if they

feel they do not have the requisite knowledge/skill to do the work or otherwise felt unnecessary risks are present. Emp 22 was clear that he did not perceive this as management shifting responsibility and liability to the employee, rather, he felt this was management's acknowledgement that there are many procedures and skill sets involved in the broad spectrum of duties and that an individual employee can't be expected to always remember every detail of every task and procedure, especially on tasks an individual hasn't recently performed. He stated that in such cases the employee would refresh by reading the SOP or ask that a more experienced employee be put on that task.

135. Empl 22 stated that high voltage (HV) apprentices are assigned to either ship-to-shore or preventive maintenance (PM) work centers. PM work centers include transformers, repairs, and street lights. He said apprentices typically spend 6-12 months at a particular work center working one to one with a mentor, who gradually increased the level of complexity of work performed by the apprentice. He stated the mentor doesn't "move you up" in complexity until the apprentice grasps the current level. He cites daily safety meetings as providing an opportunity to voice any concerns or discuss any issues that came up the day before/recently on a job site.

136. The complainants proposed a solution to the perceived lack of qualified high-voltage electricians which was addressed by leadership and found to be unnecessary.⁴⁵

Regulations

137. 29 CFR 1910.332 "Occupational Safety and Health Standards, Electrical, Training," requires employers to provide training to ensure that the purpose and function of the energy control

⁴⁵ In their discussion with the IO on May 18, 2012, COMP2 provided a Memorandum dated September 24, 2010, entitled "Federal Wage System Appropriated Fund Special Rate Ranges for Aircraft Maintenance Occupations in the Norfolk-Portsmouth-Newport News-Hampton, Virginia Wage Area." The Memorandum cited DoD Instruction 5120.39, "Department of Defense Wage Fixing Authority Appropriated Fund Compensation", dated September 10, 2008, as the authority to provide special (increased) wages for Aircraft Maintenance positions and related supervisory positions located in the Norfolk-Portsmouth area. COMP2 stated that he had suggested to MIDLANT management that they attempt to obtain similar authority to increase wages in the MIDLANT area for HV electricians. The complainants reasoned that providing the opportunity for higher wages will assist the command in recruitment and retention of qualified high voltage electricians.

program are understood by employees and that they acquire the knowledge and skills required for the safe application, usage, and removal of the energy controls.

Discussion and Analysis

138. While the IO established that before 2008 there were instances where unqualified employees were hired to work in HVE positions, supervisors are insistent that both then and now, no employee is allowed to actually perform work on electrical projects until they have been evaluated by personal observation to be competent to perform related tasks.

139. It appears to be widely understood that the specialized skills required of high voltage electricians is difficult to quantify, and is obtained only through a combination of classroom and on-the-job training.

140. Employees receive LOTO training on an annual basis. They are encouraged to review the relevant SOPs prior to commencing work each day and conduct or participate in brief safety meetings each morning. High voltage follow-on training is provided by AVO to ensure employees maintain awareness of industry standards and safety measures. Although technical proficiency training, i.e., high level, specialized skill training, is not properly documented in TRMS, supervisors and employees assert that training is conducted annually and training opportunities are widely disseminated to affected employees.

141. NAVFAC MIDLANT management has been effective in taking steps to ensure that personnel are adequately trained. They have established an apprenticeship program; identified specific hiring criteria to ensure better qualified individuals are selected; and, ensured that training is available for new and existing employees.

142. Allegations that employees were hired without the requisite skills can therefore be accepted as true. However, based upon the standard and by NAVFAC practice, there does not appear to be a violation. The special skills required to perform as a competent high voltage electrician are acquired over time, with follow-on classroom and on-the-job training. The safety risk to employees and others is thus mitigated, because NAVFAC MIDLANT has provided the necessary training, mentorship, and evaluation to apprentices and new hires before assigning them to work on HV projects consistent with the regulations. Others who are hired in peripheral occupations,

such as utilities supervisors, are not required to be HVE specialists.

Conclusion

143. The allegation that since 2007, NAVFAC MIDLANT management hired and assigned inexperienced employees as high voltage electricians without the requisite skill and training in violation of 29 CFR 1910.332 "Occupational Safety and Health Standards, The Control of Hazardous Electrical Energy (LOTO)" is Not Substantiated

Recommendations

144. That NAVFAC HQ Safety Officer review and evaluate required trade skills, including high and low voltage electrical expertise for the safety office staff, considering availability and use of subject matter experts to augment safety office staff.

145. NAVFAC MIDLANT utilize the Community Management Plan established by NAVFAC HQ for wage grade trade employees and ensure that competency training is documented in employee Individual Development Plans (IDP) and tracked in TRMS.

146. NAVFAC MIDLANT management codify the hiring policy to include SME involvement in hiring wage-grade employees with specialized skills.

Actions Planned or Taken

147. NAVFAC MIDLANT established an Apprenticeship Program that requires apprentices to enroll in courses at the local Tidewater Community College; provides for mandatory skill tests, and includes on-the-job training and mentorship. An Apprentice Coordinator is designated within PW-1 to track and document classroom training, rotational assignments, skill development, and mentor feedback.

148. Specific high voltage training is provided via contractor to provide periodic high voltage training to NAVFAC personnel, both apprentices and existing employees.

149. NAVFAC MIDLANT has posted the Community Management Plan on its website to provide employees with specific information on local training opportunities.

150. LOTO training is conducted at least annually for all high voltage electricians and tracked by PW-1.

151. NAVFAC MIDLANT has initiated a process to require a subject matter expert to be involved in the hiring process of wage grade employees, to include the development of standard questions and answers to be used during interviews.

152. MIDLANT management has considered the "special pay" option as an incentive to recruit and maintain qualified high voltage electricians and determined that it was not required.

Personnel Action Taken

153. No personnel action was taken as a result of the investigation of this allegation.

Allegation Three

That NAVFAC MIDLANT utilities supervisors allowed employees to work on electrical projects without the proper personal protective equipment in violation of Department of Defense (DoD) Unified Facilities Criteria (UFC) 3-560-01 §4.

Findings

154. The complainants alleged that employees were not consistently wearing the proper personal protective equipment (PPE) while performing high voltage work, posing a safety risk to themselves and others.

155. The Unified Facilities Criteria (UFC) mandates PPE to include:

- a. fire retardant uniforms,
- b. arc flash clothing,
- c. hard hats,
- d. safety glasses, and
- e. protective gloves.

156. NAVFAC ESAFE procedures, specifically PWBL.003 SOP imposes essentially the same requirement, and states that "any worker whose normal job includes working on or near energized electrical equipment shall wear to work as a minimum, arc flash

long sleeve shirt and pants, cotton underwear and leather gloves."

157. On June 27, 2008, in an "All Hands" Note to NAVFAC MIDLANT, Officer 5, then MIDLANT Commanding Officer, more clearly defined the phrase "wear to work" to mean that all employees shall wear these items at all times during their work shift, thereby imposing a more stringent requirement than the standard.

158. The complainants cite specific instances in which individuals were allegedly noncompliant with the regulation. On January 8, 2010, the complainants allege that Emplye 18 was wearing only gloves while changing the fluorescent light ballasts. The complainants did not provide detailed identification information regarding the employee; thus, the IO was unable to corroborate this allegation.

159. On August 4, 2011, COMP2 reported to Witness 7 , NAVFAC MIDLANT Safety Manager at the time, that employee Employee 19 refused to wear PPE while conducting electrical work at the Yorktown PWD. Witness 7t is no longer employed at NAVFAC and the IO could not corroborate the allegation.

160. On September 27, 2011, COMP2 notified Mr. Employee 10 that he and COMP1 observed NAVFAC employees Employee 20 and Employee 21, both experienced HVEs, working on electrical equipment without the appropriate PPE. Both employees denied the allegations.

161. A fact-finding was conducted with regard to the complainants' allegations and concluded that Emple 20 and Employee 21 were wearing their PPE while working on the electrical project, but had removed their shirts and sat in the utility vehicle with the air conditioning. The management official considered the two individuals' training, work history, and certifications; and determined that based on the preponderance of credible evidence no disciplinary action was warranted.

162. On September 9, 2010, an employee who was observed working on a pier without safety glasses or safety boots received a Letter of Reprimand due to his failure to wear the appropriate PPE.

163. MIDLANT employees receive PPE when they are first hired. They are fitted for arc flash shirts and pants and are issued boots, gloves, safety glasses, and any other special equipment

needed depending on the type of work they will be assigned to do. Unifirst Corporation is contracted to provide the clothing (rented to MIDLANT), provide dry cleaning services and pick-up and delivery of arc flash clothing to MIDLANT employees. Each affected employee initially receives 11 sets of arc flash clothing, which they drop off at their work center when cleaning is needed and then pick up from the work center. Prior to their initial issue, each employee receives arc flash protective overalls to wear until their permanent clothing is delivered.

164. The clothing rental contract is maintained by PW-1 personnel who actively manage the acquisition, testing, and delivery of all related PPE.

165. The arc flash clothing is designed to protect workers from unexpected electrical flash and burns. Most high-voltage employees have experienced, seen, or heard of the physical consequences of not wearing the arc flash protective gear.

166. If an employee is observed or reported not wearing the appropriate PPE, they are either corrected on the spot or a fact-finding is conducted to determine the circumstances. If the allegations are found to be true the employee may be subject to disciplinary action.

167. In May 2012 and in October 2012, the NAVFAC IO interviewed supervisors who stated that they consult with personnel office staff to determine the range of corrective action appropriate for the given infraction. The supervisor then has the discretion to impose punitive or non-punitive corrective measures within the range stipulated by personnel officer staff. During the October 2012 interview, supervisors also stated that comprehensive training for supervisors on this topic was being scheduled.

168. On October 18, 2012, the NAVFAC IO interviewed Witness 2, who indicated that MIDLANT has developed training for supervisors on the full spectrum of appropriate corrective actions available. At the time of the October 18, 2012, interview, the training had not yet commenced. In November, in conjunction with annual LOTO training, MIDLANT staff began scheduling supervisors for the training.

169. During random on-site visits by the NAVFAC IO, and interviews with high voltage workers, employees acknowledge the policy that PPE is required during working hours, but report that during summer months the arc flash clothing is very hot, uncomfortable, and potentially dangerous due to risk of heat

injury. Nevertheless, incidences are recorded in ESAMS of employees reported with only partial arc flash suits, i.e., sleeves rolled up, arc flash shirts unbuttoned, or arc flash shirt removed. Fact-finding inquiries have found that many employees wear partial arc flash suits or wear the arc flash suit improperly to increase comfort when not actually engaged in arc flash risk work.

170. MIDLANT management is aware of the potential for heat-related injury due to the heavy, non-porous fabric of the arc flash suit. In July 2011, MIDLANT instituted, on a trial basis, a procedure that allows employees to roll up arc flash suit sleeves or remove the arc flash suit shirt only during times of high heat while performing tasks where there is no risk of arc flash. The trial procedure requires written approval of both the first-level and second-level supervisor and is task-specific. This trial is not inconsistent with the UFC, which requires arc flash PPE for personnel working on or near exposed energized electrical equipment operating at 50 volts or more. The trial was coordinated with the Metal Trades Council, an employee union body, via memorandum of agreement (MOA) signed on July 7, 2011.

171. Although the original trial period was to end in January 2012, it was extended to include the summer months of 2012 when heat conditions are elevated; the trial results and conclusions are not yet available.

172. Since 2010, NAVFAC MIDLANT has, and continues to use multiple avenues to promote safety and risk mitigation. Witness 8, MIDLANT Occupational Safety and Health Manager, sends monthly safety newsletters to all supervisors with a variety of safety topics, including reminders regarding arc flash clothing. These articles contain information about MIDLANT safety mishaps and near misses. One article in particular was the result of a situation where an employee thought he did not need to wear arc-flash PPE if he was simply assisting an employee performing electrical work, such as handing tools to the actual electrical worker. Witness 8 stated that he corrected the employee and told him the incident would be published in the newsletter to clarify this line of thinking for others in similar situations.

173. Witness 8 also described the "Command Plan of the Week" sent to all MIDLANT employees by e-mail. Each Plan of the Week includes a safety note addressing safety responsibilities of senior leadership, supervisors, and employees.

174. Witness 8 also stated that NAVFAC MIDLANT developed and implemented Mishap Review Boards (MRB) held weekly to discuss all command mishaps. The MIDLANT Executive Officer chairs this board and Public Works Officers (PWO) at each site describe any mishap that has occurred during the preceding week. The PWO will discuss associated lessons learned which are then promulgated throughout the command through safety newsletter articles, minutes, and plan of the week.

175. Witness 8 also provided the NAVFAC IO with minutes from the quarterly MRB. The quarterly MRB provides a forum for management to review and discuss trend analyses of all the mishaps which occurred during the quarter. During quarterly MRBs, participants discuss strategies for improving the command safety posture and culture. According to Witness 8, "getting a consolidated engagement from our PWOs is an important first step."

Regulations

176. Department of Defense (DoD) Unified Facilities Criteria (UFC) 3-560-01 §4-4.1 requires:

a. Personal protective equipment (PPE) that provides appropriate arc flash protection for all personnel working on or near exposed energized electrical equipment operating at 50 volts or more; and

b. Protective gear includes flame resistant long-sleeve shirts and pants or coveralls; cotton or natural fiber underwear and leather electrical work shoes/boots and gloves.

Discussion and Analysis

177. Although NAVFAC SOP does not require it, the "NAVFAC MIDLANT All Hands Note" provides that employees wear protective clothing throughout the work day, even when temperatures are high and the employee is not actually working on high-voltage projects. UFC regulations require use of *arc flash protection while in "the zone" working in or near exposed energized electrical equipment of 50 volts or more*. The requirement to wear PPE when outside "the zone" is not in itself a safety risk, so removal of or partial wear of arc flash protection while *outside the zone* is not a violation of UFC regulations, but a violation of a NAVFAC MIDLANT All Hands Note, which does not form the basis of a safety violation.

178. NAVFAC MIDLANT has considered the possibility that the provision in the "MIDLANT All Hands Note" mentioned above may be too stringent and pose a safety risk in itself by forcing employees to wear arc flash clothing even when they may be subject to heat-related injury.

179. Concern for employee safety and the risk of heat-related injury during hot weather led to NAVFAC MIDLANT implementation of a pilot project, wherein workers are allowed to remove the protective shirt during conditions in which heat-related stress is likely to occur only while outside "the zone." The affected employee must obtain a waiver; keep a copy of the signed waiver during all times; and, present it to the appropriate official when asked. If this trial modification of policy proves to be effective, MIDLANT management has the option of permanently adopting a policy that would make a relaxed PPE requirement permanent.

180. The preponderance of the evidence along with observations of the NAVFAC investigator indicate that NAVFAC MIDLANT employees, on the whole, wear the proper protective gear and are very conscious of the safety risk if they fail to do so. Although isolated incidents still randomly occur, supervisors issue verbal warnings and letters of reprimand when repeated or flaEmp 22 violations are reported. First-line supervisors are the gatekeepers to enforcement and compliance. Most of them have daily safety talks and visit work-sites daily to observe and assist.

181. Supervisors have wide discretion to impose disciplinary action if violations do occur, but usually only issue verbal warnings. Isolated incidents have continued to occur in which individuals were not wearing PPE during working hours, however, employees themselves are cognizant, and for the most part, compliant with regard to wearing protective clothing and equipment especially when they are actively engaged in high-voltage work.⁴⁶

Conclusion

182. The allegation that NAVFAC MIDLANT utilities supervisors allowed employees to work on electrical projects without the proper personal protective equipment in violation of Department

⁴⁶ Discussion of other factors considered in the analysis of this allegation is contained in allegation 1.

of Defense (DoD) Unified Facilities Criteria (UFC) 3-560-01 §4 is Not Substantiated.

Recommendations

183. That NAVFAC MIDLANT Management continue to provide supervisors training with regard to employee performance measures and accountability.

184. NAVFAC MIDLANT Public Works supervisors communicate management expectations and employee accountability for compliance to assure proper procedures are followed.

185. That NAVFAC MIDLANT in conjunction with NAVFAC HQ make a decision, communicate to employees, and implement as necessary a more reasonable policy related to affected employees' requirements for wearing arc flash protective clothing consistent with UFC regulations.

Action Planned or Taken

186. NAVFAC MIDLANT Public Works Department, PW-1 section, has assumed responsibility to monitor, track, and keep inventory of safety equipment; manage contracts associated with the delivery, cleaning, and testing of PPE; and, implemented a pilot project to revisit the restrictions contained in the "MIDLANT All-Hands Note" issued by the former NAVFAC MIDLANT Commanding Officer.

187. NAVFAC MIDLANT management has implemented a pilot project based upon an MOA with the local union, establishing a trial period in which employees are allowed to remove arc flash shirt during lunch or other times not actually engaged in electrical projects. If the pilot program proves to be successful without accretion of risk, modification of the provision may be considered.

188. The MIDLANT Occupational Safety and Health Manager sends monthly safety newsletters to all supervisors with a variety of safety topics; the Command has implemented weekly and quarterly MRBs to discuss safety trends and identify lessons learned; the Plan of the Week is promulgated to all MIDLANT employees with safety notes addressing the safety responsibilities of senior leadership, supervisors and employees.

189. New critical elements related to safety have been included in employee performance standards. The new critical elements clarify management expectations for employees in supervisory

positions and requires supervisors to regularly visit job-sites to promote safety.

Personnel Action Taken

190. No personnel action was taken as a result of the investigation of this allegation.

Allegation Four:

That NAVFAC MIDLANT management officials failed to ensure compliance with the safety rules or eliminate unnecessary safety risks in violation of OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual, Chapter 24."

Findings

191. The complainants allege that many of the safety-related issues persist because management officials refused to enforce the safety rules that have already been adopted. This failure is most evident, according to the complainants, at the Norfolk and Portsmouth PWDs based on the repeated failures within those organizations, to pass annual Operation Center Inspections.

192. Two of the primary findings related to NUOC Inspections are that employees do not properly complete switching orders or conduct annual Inspections as required. These issues will be discussed more fully below.

Switching Orders

193. In their positions at the NAVFAC Utilities Operations Center (NUOC), Messrs. COMP2 and COMP3 are responsible for assisting workers in implementing switching orders to isolate energy sources before working on electrical projects.

194. The NUOC is the central point-of-contact where outage requests and implementation of switching orders are maintained. It operates 24 hours per day, 7 days per week and maintains utility drawings, SOPs, tags and locks, and high and low voltage Qualified Persons⁴⁷ (QP) lists.

⁴⁷ A qualified person is defined as an authorized employee who has skills and knowledge related to the construction and operation of the electric power

195. Switching orders are similar to a plan of action for a particular electrical project. The document is required to identify all applicable energy sources and those that have been marked or tagged. The switching order should be reviewed by the foremen and the rest of the crew so that all employees are aware of how to proceed.

196. Electricians place themselves and other employees at risk when they fail to submit switching orders or inform the NUOC about their high-voltage projects. The complainants have cited numerous examples of failure to comply with applicable safety procedures.

197. Specific guidance for the operation of the NUOC at NAVFAC MIDLANT and the process for conducting switching operations are contained in (PWBL) Procedure 01, NAVFAC Electrical Safe Acts For Employees (ESAFE) Program, and NAVFAC SOP PWBL.001 The Control of Hazardous Electrical Energy (LOTO).

198. The MIDLANT consolidated June 11, 2011, Safety Investigation found that NUOC roles and responsibilities related to handling high voltage switching, LOTO procedures and low voltage tag⁴⁸ requests were ill-defined and cumbersome. Further, attempts to call the NUOC at each step of the switching process were delayed due to long waits on the telephone, sometimes up to two hours. Finally, the Qualified Person lists were found to be outdated and incorrect.

199. The supervisors have the capability to ensure that all LOTO actions are performed by comparing work order tickets to LOTO tags and switching orders to verify that switching orders and tag requests are coordinated by the NUOC. The Safety Investigation found that supervisors generally don't verify compliance or don't understand the process.

generation, transmission and distribution equipment involved and has received safety training on the hazards involved, CPR training, and annual electrical SAFE training. The QP in charge is the key coordinator of work crews to ensure continuity of protection.

⁴⁸ Low-voltage work does not require switching orders but the NUOC maintains cognizance over requests to isolate low-voltage equipment while work is being done. A tagout is the placement of a tag (label) on an energy-isolating device to indicate that the equipment being controlled may not be operated until the tag is removed. Low-voltage electricians should contact the NUOC to advise that they are isolating a piece of equipment while work is being done, then contact them after the work is complete to release the tag.

200. The June 2011 NAVFAC MIDLANT Safety Investigation determined that hundreds of tag requests remained open; though SOPs clearly state that once the work is done the NUOC should be contacted to convey the release of the isolated energy source. This lack of communication is partially due to delays in reaching the NUOC, but also a lack of supervisory oversight.

201. Regulations also state that once an employee is found to have failed to properly follow the LOTO procedures, they should be retrained, with the training documented in the employee's training records.

NUOC Inspections

202. During the period from 2006 to 2010, COMP1 was the de facto Safety Liaison, responsible for conducting inspections of the energy control program as required by 29 CFR 1910.147(c), which states that the employer "shall conduct a periodic inspection of the energy control procedure at least annually to ensure that procedures and requirements are being followed." The periodic inspection should be performed by an authorized employee other than the ones utilizing the energy control procedure being inspected.

203. COMP1 alleges that, since his transfer from the position of Safety Liaison, no one has assumed the duty to conduct periodic inspections. Further, COMP1 alleges that even when he conducted audits and noted deficiencies, there was no accountability or follow-up to ensure corrective action. He would merely provide the audits to his supervisor.

204. Inspection records provided by COMP1 indicate that from 2008 thru 2010, he conducted routine inspections. The inspections indicated that switching orders were not completed properly and tag logs were not compared with work orders, nor was there evidence of follow-up or accountability. Inspection results were not systematically communicated to the Public Works Officer for action and management had no course of action in place to prevent repeated deficiencies.

205. The June 9, 2011, consolidated Safety Investigation also confirmed COMP1's allegations and recommended that the inspection function be delegated to the PW-1 section of Public Works. During the initial interviews with PW-1 personnel the IO found that PW-1 was still grappling with implementation of systematic inspections and were unable to provide inspection documentation.

206. NAVFAC MIDLANT management acknowledged that a significant problem exists and is working towards resolution. In interviews with Witness 4 and Witness 1, the IO was provided with a Plan of Action and Milestones (POAM) that address the lack of accountability and inconsistency. Revisions are planned to the PWBL.001 SOP, which will assign specific responsibility for supervisors to conduct inspections, and also require that the Operations and Public Works Officer assume more active roles in the inspections and ensure follow-up.

207. Witness 1 stated in an October 18, 2012, interview that the LOTO inspection process is an area that needed a lot of improvement. She stated that the quality of inspections was poor; results undocumented; and, accountability and responsibilities unclear. The revised SOP incorporates the new inspection process that includes two inspections per year by the Supervisory chain in the PWD; an additional inspection by SMEs outside of a particular PWD; updated check lists and more clear roles and responsibilities. The new SOP will require that inspection findings be documented and POAMs completed and submitted to the Operations Officer for tracking and execution.

208. Witness 1 also stated that annual LOTO training will include training on Revision "C" of the PWBL.001 SOP and will begin in the second quarter of FY13. She also stated that a review of the consolidated tag log was conducted, and all tags that were left open an inordinate amount of time were evaluated for accuracy. The review indicated that thousands of tags remained open after the equipment that was tagged had been repaired. Since that time, a concerted effort was made at all PWDs to clear the number of open tags since this effort began after the 2011 MIDLANT Safety Investigation.

209. Witness 1, in an e-mail to Witness 8, MIDLANT Safety Manager, requested that he investigate whether switching orders are filled out properly and if not, directed that appropriate action be taken. In a subsequent follow-up by the IO on November 15, 2012, Witness 8 stated that the review is still underway, and that a report will be generated once the review is complete.

Regulations

210. OPNAVINST 5100.23G Navy Safety and Occupational Health Manual, Chapter 24 requires:

a. Commanders, Commanding Officers, and Officers-in-Charge to:

(1) Ensure a current roster of trained and qualified employees who are authorized to work on hazardous energy systems and equipment is maintained; and

(2) Ensure affected employees receive training about the energy control program, i.e., lockout/tagout identification, notification requirements and general energy control program requirements.

b. Region or Activity Safety Offices shall:

(1) Ensure periodic inspections are performed by an authorized employee other than the one utilizing the procedures. Further, periodic inspection shall be documented and certified as being performed.

Discussion and Analysis

211. The prevalent identified problem was with personnel failing to comply with switching order SOPs. Verification that switching orders are complete and assurance of compliance with regulations rests firmly with first- and second-level supervisors at MIDLANT PWDs. Supervisory expertise and skill varies from site to site. An increased level of involvement and enforcement must be implemented to increase employee awareness of the safety risks and likely consequences of non-compliance. Additionally, the Commanding Officer, per instruction, is required to ensure training is provided and safety procedures are followed.

212. The complainants repeatedly reported that annual inspections of the energy control procedure had not been conducted since 2010, and management concurred that this was the case, yet no corrective action has been taken in the past to ensure compliance with SOPs regarding Inspections. However, revision C of the PWBL.001 SOP more clearly defines the roles and responsibilities of the supervisors and management with regard to conducting annual Inspections.

213. There is a lapse in enforcement of the energy control inspection process on a regular and routine basis. Although the operational tempo is high at NAVFAC MIDLANT and manpower is limited, annual inspections are required, with results communicated to the appropriate official to ensure corrective action. When implemented, the revised SOP will adequately address these shortcomings.

Conclusion

214. That NAVFAC MIDLANT management officials failed to ensure compliance with the safety rules or eliminate unnecessary safety risks in violation OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual" is Substantiated

Recommendations

215. That the revised PWBL.001 SOP be implemented as soon as possible to assign responsibility and ensure accountability and follow-up.

216. Ensure that NAVFAC MIDLANT conduct annual Inspections of each work center and provide POAMs to management regarding inspection findings and plans to take corrective action on deficiencies.

217. NAVFAC MIDLANT Public Works supervisors routinely observe LOTO operations to include comparison of work orders to switching orders.

Action Planned or Taken

218. NAVFAC MIDLANT Safety Office and PW1 have revised the PWBL.001 SOP to address the lack of accountability and follow-up. The SOP has not yet been implemented, pending union review and MIDLANT Command endorsement. However, certain aspects of the SOP have already been put into action, including implementation of a centralized Qualified Persons list that can be generated and updated electronically.

219. The revised PWBL.001 SOP includes specific responsibilities for supervisors and management to ensure the minimum requirements for LOTO of electrical energy sources are met. The revised SOP provides clarity and provides inspection checklists and procedures to delineate roles and responsibilities of MIDLANT staff.

Personnel Action Taken

220. No personnel actions were taken as a result of the investigation of this allegation.

Allegation Five

That MIDLANT management has failed to take appropriate action to correct widespread and systemic violations of safety procedures in violation of OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual."

221. The complainants reported to OSC that MIDLANT had investigated their concerns in August 2011 but that safety problems still remain. The complainants emphasize that safety issues at NAVFAC MIDLANT are widespread and systematic.⁴⁹

222. Prior to the complainants report to OSC, NAVFAC MIDLANT conducted a Safety Investigation in accordance with OPNAVINST 5102.1D, per appointment letter of June 9, 2011. The investigative team, "the team," consisted of the following five individuals:

a. Witness 7, Team Lead - Certified by the Board of Certified Safety Professionals (BCSP), NAVFAC Atlantic Safety Manager;

b. Witness 9 - Professional Engineer (P.E.) and NAVFAC MIDLANT Manager with direct knowledge of SOPs, processes, general knowledge of programs related to trade specific training, hiring process, apprentice program (SCEP), management oversight, personnel evaluations, NUOC process and others;

c. Witness 10 - Master High Voltage (HV) Electrician employed at Public Works Department (PWD) Norfolk Naval Shipyard, Subject Matter Expert (SME) with extensive experience and knowledge in private industry, utilities, and PWD/NAVFAC practices. Witness 10 monitored discussions for technical validity and addressed practical application of trade specific practices;

d. Witness 11 (BCSP) - safety professional, manager with direct knowledge of processes and cognizance for implementing safety program-related recommendations and subsequent corrective actions; and

⁴⁹ The complainants also report of a safety incident involving two apprentices that was addressed in allegation 2.

e. Witness 8 - safety professional, Deputy NAVFAC MIDLANT Safety Director with knowledge and experience associated with process development and electrical trade workforce.

223. At the commencement of the investigation, the team interviewed the complainants to determine the exact nature of their safety concerns. The team was able to distill from their discussions 23 items of concern. During the investigation, the team interviewed 35 Public Works employees and supervisors and met regularly with the complainants to provide updates and verify that they had captured the relevant issues.

224. At the conclusion of the investigation, the findings were briefed to management and to the complainants on August 18, 2011. The complainants' 23 items of concern were consolidated into the following seven actionable items. These are the issues the complainants considered systemic violations:

(1) Clarify and Improve Lockout/Tagout Inspection Process

225. Public Works Departments at various NAVFAC MIDLANT sites were reportedly failing LOTO inspections; mandatory annual inspections are not conducted routinely; and, no one was specifically assigned inspection responsibility.

Findings/ Recommendations

226. The team found that LOTO Inspections are required by OSHA 29 CFR 1910, NAVFAC Safe Acts for employees (SAFE) and SOP PWBL.001. However, responsibility for conducting the Inspections is generally misunderstood, results are not being captured, and there is no mechanism for follow-up.

227. The team recommended that NAVFAC MIDLANT establish LOTO audit responsibility & methodology; develop an inspection schedule; implement a method for capturing results; track corrective action; and, communicate the results appropriately. Observation of LOTO operations; supervisor reviews of LOTO logs; and HVE operations review of tags, MAXIMO⁵⁰ tickets, and switching orders should be incorporated into the Inspection process.

⁵⁰ MAXIMO is an integrated productivity tool and database that stores and maintains data about facilities, assets, and inventory and allows users to track work orders and status to better schedule preventive maintenance.

Corrective Action Taken

228. The Public Works Business Line PW-1 staff has re-written the PWBL.001 SOP to clarify definitions and modify the inspection process. The revised SOP specifies that Supervisors will conduct two inspections each year with signed results sent to PW-1 and a Plan of Action and Milestones (PAOM) forwarded to the Operations Officer, PW-1 and other designated team members independent from PWD members.

229. Further, the revised SOP requires that a centralized tag log be implemented throughout the MIDLANT PWDs so that each ROC/NUOC has access to the same data. Supervisors will be required to review the centralized tag log on a weekly basis to ensure that tags are opened and cleared properly, and follow-up with affected employees who do not comply.

230. The revised SOP will be implemented once the union approves the revisions and MIDLANT leadership endorses it.

(2) Equipment certification and Inspection Review

231. Hot sticks,⁵¹ Fall Protection Equipment, and Rigging Equipment were reportedly not in compliance.

232. The process to certify hot sticks involves specific SME knowledge for inspecting, cleaning, waxing, and dielectric testing as established by 29 CFR 1910.269.J (OSHA). However, responsibility for certification and inspection of equipment has not been assigned and no organized long-term plan has been developed.

Findings/Recommendations

233. The MIDLANT Safety Investigation found that there were deficiencies and that the responsibility for certifications and inspections of equipment was not reassigned after COMPl was no longer assigned to this task.

234. The Safety Investigation team did not find that any employees were using outdated hot-sticks; that hot-sticks were kept on HVE trucks and weren't required at PWDs, but there was

⁵¹ In the electric power distribution industry, a hot stick is an insulated pole, usually made of fiberglass, used by electric utility workers when engaged on live-line work on energized high-voltage electric power lines, to protect them from electric shock.

no systematic maintenance conducted. They found that fall protection (FP) and rigging equipment was being maintained and employees received adequate training on how to use the equipment.

235. The Investigative report recommended that PW-1 develop a formal process to assign responsibility; record and document specialized equipment certification and inspection to include gloves, hot-sticks, and rigging equipment.

Corrective Action Taken

236. All Hot Sticks have been inventoried, certified, and entered into ESAMS. Fall Protection Arresting Gear is currently tracked in ESAMS. Fall Protection Harnesses will continue to be managed by the Safety Office. PW1 has coordinated with Base Support Vehicle & Equipment (BSVE) department to have each PWD identify competent custodians responsible for rigging gear at each site. The custodians are designated by the certifying official and this process is in compliance with NAVFAC Instruction 11262.6A which requires accountability for these items. BSVE department now maintains data and certifies rigging gear with instruction and process in place.

(3) Ensure Proper Training⁵²

237. The complainants expressed a concern that employees hired as HV electricians and supervisors are not adequately trained.

238. The findings indicated that prior to 2009, hiring panels did not include Subject Matter Experts (SME) or supervisors, resulting in job offers to individuals who were not fully qualified. However, since 2009, selection panels consist of an SME and, in most cases, the direct-or second-line supervisor.

239. The team found that HVE Supervisors do not necessarily need to be qualified as HVEs because they are not engaged in conducting electrical work. The report noted an example where an employee was assigned as the temporary HVE supervisor for one year and is now permanent and appears to have strong competency in related SOPs. It was also noted that large PWDs have dedicated HV supervisors for the HVE shop but smaller PWDs such as Oceana have a utilities supervisor who has responsibility for managing all utility trades; water, steam, wastewater and HV

⁵² Facts are discussed in allegation 2.

electrical, and cannot be expected to be experts in all trade skills.

240. The team recommended that NAVFAC MIDLANT develop a written policy to codify the current selection process; that of using SMEs and supervisors on hiring panels and take necessary action to ensure that ESAMS reflect current qualifications of those previously hired. The Investigative team also recommended that NAVFAC MIDLANT incorporate the NAVFAC Trades Workforce Development process results into PW1.

Corrective Action Taken

241. PW1, even prior to the complainants' allegations, had taken steps to ensure adequate training. SOP training, fall safety, and LOTO training is tracked conducted and documented by PW1 personnel.

242. Supervisors are involved in the hiring process and specific questions have been created to evaluate potential candidates' skill and expertise during the interview process.

243. Despite the complainants' concern, supervisors report they do not allow employees to work on dangerous HV electrical projects unless and until they have been observed and their competence assured.

(4) Evaluate Operations Center Capacity to Manage Simultaneous Outages

244. The complainants cited numerous incidents where callers to the NUOC experienced extensive delay when trying to implement switching orders and obtain tags to mark equipment about to be repaired.

Findings/Recommendations

245. The MIDLANT Investigation found that NUOC roles and responsibilities related to handling HV switching, LOTO procedures as well as Low Voltage Tag requests should be more clearly defined and implemented.

246. The team also found that the current staffing level at the NUOC is inadequate to handle the number of calls it receives.

247. The team recommended that PW1 evaluate NUOC capacity to manage simultaneous outages and the impact of additional low voltage calls to NUOC operations.

Corrective Action Taken

248. A new policy was developed to transfer low voltage calls to the service desk vice the NUOC in order to alleviate call delays. Although anecdotal evidence, discussed above, indicates that delays of two to five minutes still occur, there has been improvement in the ability to access the NUOC.

249. The NUOC/Work Reception call capacity has been monitored; call times, number of calls, and customer feedback were reviewed. It was determined that additional resources are required. To meet this requirement, a plan is being developed by MIDLANT PWBL leadership to obtain an additional billet and realign existing personnel and schedules. Per PWBL, Witness 1 (November 20, 2012, e-mail), they expect the plan to be complete and the billet approved by February 2013. Call capacity will be reviewed again after changes have been made to ensure NUOC call capacity is acceptable.

(5) Re-establish Electrical Process Team

250. The complainants recommended that the Electrical Process Team, which had become inoperable, be reinstated.

Findings/Recommendations

251. The MIDLANT Investigation found that the Electrical Process Team (EPT) needed to be re-established as a viable means of communicating safety goals and specific concerns for electrical processes.

252. The recommendation was that MIDLANT establish an EPT comprised of one working-level electrician or electrical supervisor from each PWD to meet periodically to review trends in unsafe observations, training materials, near misses, mishaps, SOPs; recommend process improvements; serve as the local SME; and, participate as a member of the employee-driven safety program.

Corrective Action Taken

253. The monthly EPT has been re-established. Minutes are produced and action items assigned. At the most recent meeting in October, specialized high voltage training was identified.

(6) Review High-Voltage Apprentice Training

254. Apprentices were reportedly performing work without LOTO training and not receiving proper training from their supervisor or mentor.

Findings/Recommendations

255. The team found that all employees interviewed had LOTO classroom training and several had been multiple times. All apprentices attended a recently developed "hands on" LOTO training class using an electrical mock-up.

256. Another finding was that a new four-year apprentice program was implemented in 2010 that requires apprentice rotations and mentorship; attendance at Tidewater Community College; and supervisory evaluations at each site. However, the classes are geared more towards Low Voltage training with little emphasis on HV. The individual responsible for management of the apprenticeship program at NAVFAC MIDLANT maintains all records of training, classes, and progress of each apprentice.

257. The report recommended that NAVFAC MIDLANT PW-1 evaluate and research Tidewater Community College (TCC) classes taken by private industry and local power company employees to ensure the most appropriate courses are being provided to HV electrical apprentices.

258. The report also recommended full implementation of the August 30, 2010, Apprentice Program, NAVFAC MIDLANT Instruction 12410.2, and continued support of the NAVFAC Trades Workforce Development process improvement team. A further recommendation was that the Student Career Experience Program (SCEP) Manager perform routine audits with greater frequency to ensure apprentices are receiving adequate and consistent mentoring with a mechanism for upward communication to identify inconsistencies.

Corrective Action Taken

259. The SCEP Apprenticeship program is fully implemented and functioning well.

(7) Review Current Staffing/Resources for Fall Protection

Findings/Recommendations

260. The recommendation was that NAVFAC MIDLANT develop a process and assign responsibility for specialized equipment certification and inspections (gloves/sticks/rigging) to include

certification schedule and centrally managed results. The team also recommended that NAVFAC MIDLANT Safety Office evaluate Fall Protection Competent Person capacity at each PWD, assigning and train additional personnel if necessary.

Corrective Action Taken

261. The MIDLANT Safety Manager has identified employees to be designated as "competent persons." Training is complete.

Regulation

262. OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual 205.b." Safety is an inherent responsibility of command. Regions and activities shall implement all aspects of the Navy Safety and Occupational Health (SOH) program and the Operational Risk Management program through the chain of command.

Discussion and Analysis

263. While the actions taken by MIDLANT management have not met the full expectations of the complainants, the command has nevertheless taken numerous actions to systemically improve safety for electricians and others at MIDLANT.

264. Additional recommendations contained in this report are expected to further mitigate safety risks and more fully address the complainants' concerns.

Conclusion

265. The allegation that MIDLANT management has failed to take appropriate corrective action to correct widespread and systemic violations of safety procedures is Not Substantiated.

Other Command Initiatives

266. The Command has implemented other programs to enhance the safety posture. MIDLANT Instruction 5103.1 "Safety Committee Program" encourages various Safety Committees to provide appropriate program leadership and obtain critical first-hand input fostering ideas for safer work environments.

267. Based on the MIDLANT 5103.1 Instruction, "Safety Committee Program," MIDLANT has established Employee Driven Safety Committees (EDSC) at each PWD. EDSCs write their own charters to permit a great level of latitude in directing themselves towards improved safety from an employee perspective. The PWO approves and signs the charter and is responsible to ensure the

committee receives the appropriate resources. This forum provides employees another avenue to offer suggestions for safety improvements, report deficiencies, and receive safety guidance.

268. In addition, the Command regularly distributes "lessons learned" abstracts which are promulgated across the command. The abstracts share common safety hazards and identify alternate courses of action to prevent future mishaps.

269. MIDLANT also posts videos, blogs, and other media to promote safety.

270. MIDLANT established within the Public Works Business Line the Programs and Business Management (PW-1) section to provide specific focus on safety, process improvement, community management, and resourcing.

271. MIDLANT established regular safety meetings and forums, to include daily work center "5-minute safety stand-up" meetings, weekly or semi-monthly work center safety meetings; Weekly Mishap Review Boards, Quarterly Mishap Review Boards, Annual Supervisor Safety Stand-Down, as well as Supervisor Safety Committee and Employee Driven Safety Committee meetings.

272. MIDLANT Safety Office and PW-1 have revised the PWBL.001 SOP ("Revision C") to address the lack of accountability and follow-up. The SOP is expected to be implemented by January 2013, pending union review and MIDLANT Command endorsement; however, certain aspects of the SOP have already been put into action, including implementation of a centralized qualified persons list which can be generated and updated electronically.

Other Recommendations

273. Recommend that all remaining actions planned be tracked through to completion by NAVFAC MIDLANT management and reported to the Commander, Naval Facilities Engineering Command when complete.

Appendix A - List of Actual/Apparent Violations

a. OPNAVINST 5100.23G "Navy Safety and Occupational Health Manual"

b. 29 CFR 1910.147(c)(6) "Occupational Safety and Health Standards, General Environmental Controls."

c. Department of Defense(DoD) Unified Facilities Criteria (UFC) 3-560-01 §4

Appendix B - Reference Documents

1. Safety Investigation Report/ Symbol 5102
2. 29 CFR 1910.147, Occupational Safety and Health Standards, Control of Hazardous Energy (lockout/tagout)
4. OPNAVINST 5100.23, Chapter 24 21 Jul 2011 NAVY SAFETY AND OCCUPATIONAL HEALTH PROGRAM MANUAL
5. NAVFAC Business Management System, F-12.27.1 Energy Program Governing Standards
6. NAVFAC ELECTRICAL SAFE - Procedure PWBL-SAFE 01
7. 29 CFR 1910.332 Occupational Safety and Health Standards, Electrical, Training,
8. NAVFAC Electronic Safety Management System (ESAMS) database
9. National Fire Protection Association's Electrical Safety in the Workplace (NFPA 70E)

Appendix C - Witness List

1. COMP1, Engineering Tech, NAVFAC mid Alantic, GS-0802-11, Complainant
2. COMP2 , Engineering Tech, NAVFAC Mid Atlantic GS-0802-11, Complainant
3. COMP3 - Engineering Tech, NAVFAC Mid-Atlantic, GS-0802-11, Complainant
4. Witness 11, Occupational & Safety Heath, Naval Safety Center, GS-13
5. Witness 8 , Acting Occupational Safety and Health Director, NAVFAC Mid Atlantic, GS-0018-13
6. Witness 10, High Voltage Electrician, NAVFAC Mid Atlantic, WG-2810-10
7. Witness 7, Safety Project Manager, NAVFAC Atlantic, GS-0018-13
8. Witness 9 , Utilities Energy and Maintenance Manager, Public Works Dept, NAVFAC Mid Atlantic
9. Witness 6 ; Personnel Development Training Coordinator, PW1 Programs and Business management Office, NAVFAC Mid Atlantic, GS-1712-12
10. Witness 3, Utilities Superintendent, , NAVFAC Mid Atlantic, GS-1601-13
11. Witness 5 , Utilities Energy and Maintenance Product Line Coordinator, NAVFAC Mid Atlantic, GS-1801-14
12. Witness 4, Supervisory General Engineer, NAVFAC Mid Atlantic, GS-0801-13
13. Witness 1 , NAVFAC MIDLANT Public Works Business Line Coordinator, GS-15
14. Witness 12, NAVFAC MIDLANT Public Works PW1 Manager
15. Witness 2 , NAVFAC MIDLANT Public Works PW1 Manager

REDACTED NAMES KEY

The three complainants, Mr. Agee, Mr. Gatewood and Mr. Golembiewski are identified as COMP1, COMP2 and COMP3. Individuals interviewed by the Investigating Officer are identified as Witnesses 1-12, individuals mentioned in the report are identified as employees 1-22 and Naval Officers referenced in the report are identified as officer 1-5. In order to maintain the text spacing in the report, the word complainant and employee had to be abbreviated, at times. The witness and employee key follows:

Employee 1 is

Employee 2 is

Employee 3 is

Employee 4 is

Employee 5 is

Employee 6 is

Employee 7 is

Employee 8 is

Employee 9 is

Employee 10 is

Employee 11 is

Employee 12 is

Employee 13 is

Employee 14 is

Employee 15 is

Employee 16 is

Employee 17 is

Employee 18 is

Employee 19 is

Employee 20 is

Employee 21 is

Employee 22 is

WITNESSES

Witness 1 is

Witness 2 is

Witness 3 is

Witness 4 is

Witness 5 is

Witness 6 is

Witness 7 is

Witness 8 is

Witness 9 is

Witness 10 is

Witness 11 is

Witness 12 is

OFFICERS

Officer 1 is

Officer 2 is

Officer 3 is

Officer 4 is

Officer 5 is