



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

April 9, 2013

Docket No. 03029462
EA-13-039

License No. 45-23645-01NA

RDML K. Slates
Director, Energy and Environmental Readiness Division (N45)
Office of Chief of Naval Operations
Department of the Navy
ATTN: N45, Rm 2D258
2000 Navy Pentagon
Washington, DC 20350-2000

SUBJECT: NRC INSPECTION REPORT NO. 03029462/2013001, DEPARTMENT OF THE
NAVY BIENNIAL INSPECTION AND NOTICE OF VIOLATION

Dear Admiral Slates:

This refers to an announced U.S. Nuclear Regulatory Commission (NRC) team inspection conducted February 4 through March 6, 2013. The purpose of the inspection was to review the activities authorized under the Department of the Navy Master Materials License (MML). The NRC's preliminary findings were discussed with you and your staff, on February 7, 2013, at the conclusion of the on-site inspection. The final results of the inspection were discussed with members of your staff via telephone on March 6, 2013.

This inspection consisted of an examination of activities conducted under the Navy's MML as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of the MML. The areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities in progress, and interviews with personnel.

The NRC team determined that the Navy implemented its MML in accordance with the NRC licensing and inspection policies and procedures, and in a manner that protects the public health and safety.

However, based on the results of this inspection the NRC has determined that two Severity Level IV violations of NRC requirements occurred. The violations involved: 1) the failure to provide written notification to the NRC that the Navy decided to permanently cease principal activities at two permitted sites; and 2) the failure to complete decommissioning at two permitted sites within 24 months. The violations were evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. The violations are being cited in the Notice because they were identified by the NRC.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. You may wish to refer to the NRC Information

Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," for assistance in formulating your response.

If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC will review your response to the Notice to determine whether further enforcement action is necessary.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the Public without redaction.

Please contact Shawn Seeley at 610-337-5102 if you have any questions regarding this matter.

Sincerely,

/RA/

Blake Welling, Chief
Materials Security and Industrial Branch
Division of Nuclear Materials Safety

Enclosures:

1. Notice of Violation
2. Inspection Report No. 03029462/2013001

cc w/ enclosures:

CAPT D. Davis-Urgo, Executive Secretary

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/RA/

Blake Welling, Chief
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1. Notice of Violation
2. Inspection Report No. 03029462/2013001

cc w/ enclosures:

CAPT D. Davis-Urgo, Executive Secretary

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| DATE | 3-27-13 | | 3-28-13 | | 4-3-13 | | 04/03/13 | |
| OFFICE | DNMS/RI | | ORA/RI | | DNMS/RI | | | |
| NAME | RLorson | | MMcLaughlin/mmm* | | BWelling/bdw | | | |

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NOTICE OF VIOLATION

Department of the Navy
Washington, DC

Docket No. 03029462
License No. 45-23645-01NA
EA-13-039

During an NRC inspection conducted from February 4 – March 6, 2013, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. 10 CFR 30.36(d)(2) requires, in part, that licensees provide notification to the NRC in writing within 60 days of deciding to permanently cease principal activities at the entire site or in any separate building or outdoor area that contains residual activity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements. Additionally, the regulation requires that the licensee must either begin decommissioning its site, or any separate building or outdoor area, so that the building or outdoor area is suitable for release in accordance with NRC requirements, or submit within 12 months of notification, a decommissioning plan and begin decommissioning upon approval of that plan.

Contrary to the above, as of February 7, 2013 (a period greater than 60 days), the Navy has failed to provide written notification to the NRC that it decided to permanently cease principal activities at two permitted sites that contain residual radioactivity such that they are not suitable for release in accordance with NRC requirements (10 CFR Part 20 Subpart E).

Specifically:

1. In correspondence dated September 17, 2010, the Naval Radiation Safety Committee acknowledged that the Naval Postgraduate School, Monterey, California, had ceased all principal activities with licensed materials and as of February 7, 2013, a period greater than 12 months, the licensee had neither begun decommissioning nor submitted a decommissioning plan for the Naval Postgraduate School.
2. In correspondence dated September 21, 2012, the Naval Radiation Safety Committee acknowledged that the Space and Naval Warfare Systems Center Pacific, San Diego, California, had ceased all principal activities with licensed materials.

This is a Severity Level IV violation. (Section 6.3)

- B. 10 CFR 30.36(h)(1) requires, in part, that licensees complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning, unless an alternative schedule for completion of decommissioning has been approved by the NRC.

Contrary to the above, as of February 7, 2013 (a period greater than 24 months), the Navy has failed to complete decommissioning at two permitted sites.

Specifically:

1. On June 2, 2010, the Navy initiated decommissioning of the Naval Surface Warfare Center Division, Dahlgren, Virginia, and was, therefore, required to complete decommissioning by June 2, 2012.
2. On January 5, 2011, the Navy initiated decommissioning of the Naval Research Laboratory Hypervelocity Gun Facility at the Naval Research Laboratory (NRL) Chesapeake Beach, Maryland, and was, therefore, required to complete decommissioning by January 5, 2013.

This is a Severity Level IV violation. (Section 6.3)

Pursuant to the provisions of 10 CFR 2.201, Department of the Navy is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, any response which contests an enforcement action shall be submitted under oath or affirmation.

Your response will be placed in the NRC Public Document Room (PDR) and on the NRC Web site. To the extent possible, it should, therefore, not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated This 9th day of April 2013

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection No. 2013001

Docket No. 03029462

License No. 45-23645-01NA

Licensee: U.S. Department of the Navy

Location: Radiological Controls and Health (N455)
Energy and Environmental Readiness Division
Office of the Chief of Naval Operations
2000 Navy Pentagon (2D253)
Washington, DC 20350-2000

Locations Inspected: Radiological Affairs Support Office
Naval Weapons Station
Yorktown, VA

Navy and Marine Corps Public Health Center
Portsmouth, VA

Independent NRC inspections of permittees listed in Appendix D

Inspection Dates: February 4 through March 6, 2013

Inspectors: Shawn Seeley, Health Physicist, Materials Security & Industrial Branch, RI
Mark Roberts, Senior Health Physicist, Decommissioning Branch, RI
Tara Weidner, Senior Health Physicist, Medical Branch, RI
Jackie Cook, Senior Health Physicist, Nuclear Materials Safety Branch B, RIV
Kevin Null, Senior Health Physicist, Medical Licensing Branch, RIII
Scott Wilson, Health Physicist, Materials Security & Industrial Branch, RI
Orysia Masnyk-Bailey, Health Physicist, Decommissioning Branch, RI

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| Approved By: | /RA/ | 04/09/13 |
| | Blake Welling, Chief Materials Security & Industrial Branch Division of Nuclear Materials Safety Region I | date |

EXECUTIVE SUMMARY

U.S. Department of the Navy
NRC Inspection Report No. 03029462/2013001

This announced Nuclear Regulatory Commission (NRC) inspection evaluated the Department of the Navy's implementation and administration of activities conducted under its Master Materials License. The inspection included an assessment of the licensee's implementation of its centralized radiation control program; an evaluation of the adequacy of the licensee's technical staffing and training; a review of the results of NRC independent inspections of the licensee's permitted facilities; an evaluation of the licensee's incident and allegation response programs; a review of the licensee's radioactive materials permitting and inspection programs, including accompaniments of licensee inspectors during the performance of its inspections; a review of the licensee's implementation of its enforcement policy; and an examination of the Naval Radiation Safety Committee's oversight of activities. Licensed activities conducted from June 1, 2011, through March 6, 2013, were reviewed during this inspection. In evaluating the licensee's overall performance, the inspectors conducted interviews and discussions with licensee staff, evaluated the licensee's response to an NRC questionnaire, reviewed documents related to Master Materials License activities, and observed licensee staff during the performance of their duties.

The inspection team concluded that the licensee's permitting, inspection, allegation, and incident response programs were adequate and implemented in a manner that protected the health and safety of workers and the general public.

The inspection team identified two Severity Level IV violations: 1) a failure to provide timely written notice to the NRC after permanently ceasing licensed activities at two permitted sites; and 2) a failure to timely complete decommissioning activities at two permitted sites.

Additionally, the inspection team evaluated the corrective actions taken by the licensee to correct the violations identified during the previous biennial inspection. The team concluded that the licensee adequately addressed the violations and were closed.

The team's assessments of the program areas are summarized below.

Management Oversight

The inspection team concluded that the Naval Radiation Safety Committee had centralized control over the radioactive materials program and that it executed its responsibilities and provided adequate oversight of the licensee's radiation safety and regulatory compliance programs in a manner that protected the health and safety of licensee staff and the public.

Technical Staffing and Training

The inspection team concluded that the licensee had a sufficient number of fully qualified and experienced staff to implement oversight of the day-to-day operations of the licensee's radioactive materials program, and was making progress toward the full qualification of new staff members. The team also concluded that the licensee achieved a successful balance in the

acquisition and training of staff and the subsequent management of the permitting and inspection workload.

Technical Quality of Inspections

The inspection team concluded that the licensee's inspection program was adequate to ensure that inspection findings were well-founded, appropriately documented, and communicated to permittees in a timely manner. The team noted that during subsequent permittee inspections, the licensee inspectors reviewed any violations identified during the previous inspection, and confirmed that corrective actions were implemented by the permittees.

Status of Materials Inspection Program

The inspection team concluded that the licensee conducted inspections in accordance with the intervals described in NRC Inspection Manual Chapter 2800. The team determined that the licensee appropriately assigned priority codes and inspection due dates to permittee programs. The team also determined that the inspections were conducted in a timely manner.

Technical Quality of Permitting

The inspection team concluded that technical permitting reviews performed by licensee staff were processed in a manner consistent with NRC licensing policies, procedures, and guidance. In addition, the team determined that the technical permitting reviews performed by licensee staff appropriately addressed health and safety issues.

Status of Permitting Program

The inspection team concluded that the licensee processed permitting actions in accordance with its timeliness goals. The team determined that the process for reviewing and issuing permitting actions by the licensee was adequate.

Decommissioning Oversight Program

The inspection team concluded that the licensee's decommissioning inspection program was adequate to ensure that a thorough assessment of the sites was performed and the findings appropriately documented. The team noted that although permit amendments at decommissioning facilities were properly prepared, the internal guidance documents did not provide sufficient information to determine when decommissioning amendments were required.

The inspection team determined that the administrative processes relating to decommissioning timeliness were not conducted in full compliance with NRC regulations. The inspection team identified two Severity Level IV violations: 1) a failure to provide timely written notice to the NRC after permanently ceasing licensed activities at two permitted sites; and 2) a failure to timely complete decommissioning activities at two permitted sites. The inspection team also noted that the licensee had initiated measures to address the decommissioning timeliness violations.

Allegation and Incident Handling Programs

The inspection team concluded that the licensee's incident and allegation reporting was conducted in a manner that was in accordance with regulatory requirements. The team noted that the licensee could benefit by providing allegation training for new staff earlier in the qualification process.

National Source Tracking System Program

The inspection team concluded that the licensee's program for maintaining and updating the National Source Tracking System was adequate and implemented effectively.

NRC Independent Inspections of Licensee Permitted Facilities

The inspection team concluded that licensee and permittee activities were conducted in a manner that protected the health and safety of the licensee staff and the public, based on the results of the NRC's independent inspections. The team determined that the licensee adequately addressed any violations that were identified during previous NRC independent inspections of permittees.

REPORT DETAILS

1. Program Overview

The licensee is authorized under a Master Materials License (MML) to issue radioactive materials permits and to inspect permittees throughout the United States Navy and Marine Corps. The licensee oversees 77 permittees at the Radiological Affairs Support Office (RASO) and 13 at the Navy and Marine Corps Public Health Center (NMCPHC). The RASO also oversees activities relative to decommissioning at Naval and Marine Corps permitted sites and those facilities designated for closure under the authority of the Base Realignment and Closure (BRAC) Commission. The Navy MML, License number 45-23645-01NA, was issued by the NRC in 1987 and does not have an expiration date.

The Navy MML has centralized control over its radioactive materials program through the Naval Radiation Safety Committee (NRSC). The NRSC is responsible for providing oversight of the Navy's implementation of its MML and associated permittee activities. The NRSC has delegated the authority to manage the day-to-day operations of the Navy's radioactive materials program to the RASO and the NMCPHC. The RASO is responsible for managing the radiation safety program under the MML for the non-medical uses of radioactive materials. The NMCPHC is responsible for managing the radiation safety program under the MML for the medical uses of radioactive materials.

2. Management Oversight

2.1 Inspection Scope

The inspection team evaluated the NRSC's organization and management oversight activities to determine if the NRSC adequately controlled the use of licensed radioactive material as required by the MML and NRC requirements. The evaluation included observations of NRSC quarterly meetings, discussions with licensee representatives, a review of audit reports and program documentation, and an assessment of the licensee's methods and effectiveness of communications with its permittees.

2.2 Observations and Findings

The NRSC had effectively delegated the authority for routine oversight of permitted activities to two Technical Support Centers (TSCs): the RASO and the NMCPHC. The TSCs managed the licensee's day-to-day operations under the MML and were responsible for maintaining the licensee's radiation safety program, which was described in a standard operating procedure (SOP) manual, revised on November 2, 2012. The NRSC responsibilities included, but were not limited to, maintaining an adequate level of staff to execute the radioactive materials program; training and qualifying the TSC staff; implementing the permitting, inspection, and enforcement programs; responding to events, incidents, and allegations; and maintaining effective communications with permittees under the MML.

The TSCs were also responsible for implementing the Letter of Understanding (LOU) between the Navy and the NRC. The LOU references policies and procedures that

ensured consistency between the Navy and the NRC requirements. The Navy policies and procedures described the protocols for: processing permits, conducting inspections; taking enforcement action; training TSC staff in inspection and permitting activities; responding to incidents and events; and managing allegations. The RASO permittees are expected to follow the Naval Sea Systems (NAVSEA) Command Radiological Affairs Support Program Manual S0420-AA-RAD-010 (RAD-010). This manual was revised twice during the review period with the latest revision (revision 1A) issued on August 7, 2012.

The NRSC met quarterly and was comprised of Senior Navy headquarters and field representatives. The NRSC's Executive Secretary and selected members of the NRSC performed internal audits of the TSC's management of the licensee's radiation safety program. Annual audits were conducted in accordance with 10 CFR Part 20, and provided the licensee management with an opportunity to evaluate the TSC's effectiveness in the implementation of the radiation safety program.

The inspection team reviewed the audit reports for 2011 and 2012, which were performed by the Executive Secretary for the NRSC. Elements of the radiation safety program reviewed during the audits included: a selection of completed permitting actions and inspections conducted by TSC staff during each year; current TSC staffing levels; TSC response to events and allegations; and adherence to Navy processes, policies and procedures. The overall results for both audits were satisfactory, with minor deficiencies noted and recommendations provided.

The inspection team reviewed the licensee's methods used to communicate items of interest to its permittees. The primary methods of communication were through newsletters, information notices, and annual radiation safety officer meetings. The team evaluated the content of the newsletters and information notices and determined that relevant radiation safety regulatory and related issues were communicated to the permittees in an effective and timely manner. TSC staff also used annual radiation safety officer meetings as a mechanism to reemphasize, as applicable, the topics presented in the newsletters and information notices.

2.3 Conclusion

The inspection team concluded that the NRSC had centralized control over the radioactive materials program and that it executed its responsibilities and provided adequate oversight of the licensee's radiation safety and regulatory compliance programs in a manner that protected the health and safety of licensee staff and the public.

3. Technical Staffing and Training

3.1 Inspection Scope

The inspection team reviewed the licensee's radioactive materials program staffing level and staff turnover, as well as the technical qualifications and training history of the Radiation Protection Managers (RPMs) to determine whether staffing and training were

adequate for the scope of the program and licensee commitments. In evaluating these elements, the team interviewed licensee management and staff members; reviewed the licensee's formal qualification program, including the status of staff members pursuing full qualification; and evaluated the licensee's refresher training program.

3.2 Observations and Findings

The inspection team determined that the licensee staff at the TSCs, referred to as RPMs, was trained as both inspectors and permit reviewers. At the time of the inspection, the licensee did not have a formal qualification process for permit reviewers, but was developing a program for the RPMs for such qualification.

The RASO was staffed with a Navy Program Officer in Charge (OIC), a Civilian Director of Inspection/Permitting, a Lead RPM, and nine RPMs. During this review period, there were five fully qualified RPMs who independently performed inspections, and four RPMs hired to fill vacancies and were in training to become fully qualified inspectors. There was a lead RPM, who was also a qualified inspector and performed inspections as necessary. The 10 RPMs report to the Radiation Program Director, who was a qualified inspector. The inspection team reviewed the licensee's qualification plan for completion of the training of the newly hired RPMs by the end of fiscal year 2016.

The NMCPHC was staffed with an OIC, referred to as the Team Leader, and two RPMs. The RPMs and Team Leader independently performed inspections. The OIC was an active duty member of the Navy, and the position turns over approximately every three years.

In accordance with the licensee's procedures, all qualified TSC staff members were required to be evaluated each year by licensee management while conducting an inspection. The last biennial inspection identified a violation for failure to accompany the lead RPM in 2009, and one other RPM in 2010. Through interviews of RASO management and staff and a review of records, the inspection team confirmed that since the last biennial inspection, all qualified TSC inspectors had been evaluated while conducting an inspection, as required.

Since the last biennial inspection, the licensee filled four vacancies in the RASO by hiring four new RPMs. The inspection team noted that the filling of vacancies had been difficult in the past and in order to reduce this difficulty, the licensee created a training division under the RASO named the Radiological Affairs Support Program (RASP) Technical Assistance Team (TAT). Although the TAT was part of the RASO, it functioned independently of the Navy's MML program. The TAT was comprised of a director, a lead trainer, and ten staff members. The TAT had the following functions: 1) act in a support/advisory role for the RASO; 2) provide training and radiological technical assistance to permittee staff; 3) act as a potential feeder to fill vacancies that may occur in the RASO; and 4) respond to incidents. The team observed that the four vacancies in the RASO were filled through personnel promotions from the RASP TAT during the review period.

The RASO also directed the Environmental Programs Division (EPD), which is staffed with Environmental Protection Managers (EPMs). These individuals were involved in the oversight of the Navy's decommissioning work, which was performed by contractors. The EPMs oversaw decommissioning projects and acted as the interface between the contractors and RASO. The EPD was staffed by a director, a lead EPM, and five EPMs. The last biennial inspection noted that the EPMs had received allegations, but had not received formal allegation training. The inspection team determined, based on discussions with the EPMs, that the issue was corrected and that the EPMs had received formal allegation training through the NRC's electronic allegation training course.

Similarly, the last biennial inspection report indicated that the RPMs in the RASO and the NMCPHC had not received specialized training that would enhance their jobs. The report indicated that although the RPMs had received allegation training through the NRC electronic allegation training course, the licensee did not have a program for conducting allegation refresher training. The inspection team determined that the licensee planned to implement a policy to require that the licensee staff receive annual allegation refresher training, based on a review of records and discussions with RASO staff members.

3.3 Conclusion

The inspection team concluded that the licensee had a sufficient number of fully qualified and experienced staff to implement oversight of the day-to-day operations of the licensee's radioactive materials program, and was making progress toward the full qualification of new staff members. The team also concluded that the licensee achieved a successful balance in the acquisition and training of staff and the subsequent management of the permitting and inspection workload.

4. **Technical Quality of Inspections**

4.1 Inspection Scope

The inspection team reviewed inspection plans, inspection reports, enforcement documents, and correspondence associated with inspections conducted by licensee staff during the review period to determine if licensee inspections were consistent and conformed with the NRC's inspection procedures. The NRC conducted 12 independent inspections of licensee permittees and accompanied eight licensee inspectors while they conducted inspections of permittees under the Navy's MML to evaluate the licensee's implementation of its radiation safety program, and compliance with NRC regulations. The team also interviewed the RPMs and reviewed the licensee's implementation of its enforcement policy. This included a review of the permit, permitting related documents, and regulatory requirements.

4.2 Observations and Findings

Radiological Affairs Support Office, Yorktown, VA

The inspection team determined that, at the time of the review, the RASO had 77 permittees subject to routine inspections. In discussions with the RASO staff, it was noted that the Navy and Marine Corps bases may have multiple permits and the RASO may inspect one or more of these permits during an inspection trip. In addition to the inspection of permits authorizing the use of radioactive materials, the RASO also inspects those permits authorizing x-ray or non-ionizing radiation uses.

The inspection team observed that the licensee developed checklists and field notes for each inspection type. The RPMs used these to ensure that complete and thorough inspections were performed. The RASO inspected 23 commands between June 2011 and January 2013, of which 13 had no findings. Severity Level (SL) IV and V violations were issued to 10 commands, one of which (permit no. 45-00173-E1NP) received an unsatisfactory rating based on multiple SL IV and V violations cited.

The inspection team also determined that the licensee had 19 permittees subject to NRC Orders: EA-05-090, "Order Imposing Increased Controls," dated 11/14/05 and EA-07-305, "Order Imposing Fingerprinting and Criminal History Records Check for Unescorted Access to Certain Radioactive Material," dated 12/5/07 (Orders). The team noted that the RASO inspectors performed the security inspections concurrently with the routine safety inspections.

Based on interviews of the five qualified RPMs, the inspection team determined that each RPM was technically knowledgeable in radiation safety practices and NRC regulations. The RPMs utilized inspection checklists in an effective manner while performing inspections. In addition, the RASO staff had successfully integrated a review of safety culture into its routine inspection program.

The inspection team observed that the RASO staff utilized the Navy's Radiation Safety Manual (RAD-010) as guidance for citing violations. The team observed that the RAD-010 manual had been updated twice during the review period. Based on a review of permit files and interviews of the RASO staff, the team determined that the licensee was using the most current version of the RAD-010 to cite violations. The team also noted that the Navy had incorporated examples of violations from the NRC Enforcement Policy into the revised RAD-010. Subsequently, training was provided to the TSC staff on the required information necessary to properly document and cite violations.

The inspection team determined that permittee inspection findings and potential violations were initially communicated between the RASO management and the NRSC Executive Secretary by telephone. Subsequently, a written report with the inspection findings and violations as applicable (including the Severity Level) or recommendations for improvement was sent to the permittee's Base Commanding Officer.

The last biennial inspection identified violations for failure: 1) to properly cite violations; and 2) to provide the NRSC with the results of satisfactory inspections within 30 days.

The inspection team confirmed through interviews with staff and a review of the inspection files that violations were clearly cited and that satisfactory inspection reports were forwarded to the NRSC within 30 days.

Navy and Marine Corps Public Health Center, Portsmouth, VA

The inspection team determined that the NMCPHC had 13 permittees; three were inspected annually (i.e., broad scope and high dose rate remote afterloader programs) and 10 were inspected at three-year intervals. Two permittees were subject to security Orders and the security inspections were performed concurrently with the routine safety inspection.

The inspection team determined there were two fully qualified RPMs and a qualified Team Leader that performed inspections. The RPMs and Team Leader were found to be technically knowledgeable and well versed in the appropriate inspection methods including the use of appropriate survey meters to perform independent and confirmatory surveys. The team also determined that the NMCPHC staff developed inspection checklists and field notes for each inspection type. The RPMs and Team Leader used the checklists to ensure that complete and thorough inspections were performed. The team confirmed through a review of inspection files, that inspections and violations were generally well documented. In addition, the NMCPHC inspectors successfully integrated a review of safety culture into their routine inspection program.

The inspection team determined during the review period that nine permittees were inspected by the licensee, with violations identified at three. All violations were cited at SL IV or V. Inspection results were thoroughly documented and any cited violations were supported and well written.

A list of inspection casework files reviewed is included in Appendix B.

4.3 Conclusion

The inspection team concluded that the licensee's inspection program was adequate to ensure that inspection findings were well founded, appropriately documented, and communicated to permittees in a timely manner. The team determined that during subsequent permittee inspections, the licensee inspectors reviewed any violations that were identified during the previous inspection, and confirmed that corrective actions were implemented by the permittees.

5. Status of Materials Inspection Program

5.1 Inspection Scope

The inspection team reviewed the licensee's inspection frequencies for permittees and its timeliness for completing inspections. In evaluating these elements, the inspection team interviewed licensee staff, reviewed permittee inspection files, and compared licensee inspection metrics data to determine inspection program status.

5.2 Observations and Findings

The inspection team noted that the licensee had updated its SOP manual in March 2012, to coincide with NRC Inspection Manual Chapter (IMC) 2800. The manual was subsequently revised on November 2, 2012. The inspection frequencies in the licensee's SOPs were usually more stringent than those in IMC 2800.

Through interviews of TSC staff and a review of selected permittee files, the team determined that routine inspections were typically performed within the required timeframes (i.e. intervals less than + or - 25 percent) and that inspections following escalated enforcement were performed within a six-month timeframe. The inspection team observed that three initial inspections (United States Marine Corps (USMC) Museum, National Naval Aviation Museum, and Navy Medicine Research Center) were not completed within the required inspection frequency established in the licensee's RAD-010 manual. Specifically, Section 4.3 of the RAD-010 stated, in part, that permittees with newly issued radioactive materials permits were to be inspected within six months of receipt of permitted material. The team determined that the two museum inspections were not completed within the six-month timeframe, as RASO staff wanted to ensure that trained and qualified individuals were retained to oversee the radiation safety programs at those facilities. The Navy Medicine Research Center was issued a new permit on September 19, 2011, and the initial inspection was completed seven days past the six-month window. The team observed that although the inspections were not completed within the six-month window, the initial inspections were completed within the 12-month timeframe specified in NRC IMC 2800. The team also determined that any delay in conducting the initial inspections resulted in no safety significance.

The inspection team noted that the TSCs maintained databases to support the day-to-day management and planning of the inspection program. The database included the tracking of inspection results to ensure that reports were provided to permittees within the licensee metric of 60 days.

The inspection team determined that the inspections conducted by the licensee during the review period were unannounced, except in instances where overseas travel was required, (i.e. Guam) based on interviews with TSC staff, NRC accompaniments of TSC staff, and NRC independent inspections.

The last biennial inspection identified violations for failure: 1) to perform routine and follow-up inspections at the frequencies specified in IMC 2800; and 2) to conduct unannounced inspections. The team confirmed, through interviews with TSC staff and a review of the inspection tracker database, that the licensee had performed unannounced routine and follow-up inspections in accordance with IMC 2800.

5.3 Conclusion

The inspection team concluded that the licensee conducted inspections in accordance with the intervals described in NRC Inspection Manual Chapter 2800. The team determined that the licensee appropriately assigned priority codes and inspection due

dates to permittee programs. The team also determined that the inspections were conducted in a timely manner.

6. Technical Quality of Permitting

6.1 Inspection Scope

The inspection team assessed the technical quality of the permitting process by reviewing 14 actions completed at the TSCs. The permitting actions were evaluated to ensure that applicable regulations and guidance documents were used. This evaluation included: a review of permit conditions; adherence to sealed source and device registration requirements; appropriate training and experience authorizations; adequacy of facilities and equipment; use of operating and emergency procedures for the radionuclides and quantities used; and consideration of enforcement history for permit renewals. The permitting actions were evaluated for completeness, consistency, timeliness, and adherence to good health physics practices. The retention of documents required to support the requested actions was also reviewed.

6.2 Observations and Findings

The inspection team determined that the technical permitting reviews conducted by the TSC staff adequately addressed health and safety issues. Specifically, the team determined that the permit actions were thorough, complete, of good quality, and properly addressed health, safety, and security issues. The permit files contained appropriate documentation to support the permitting actions. The permitting actions followed the NRC NUREG-1556 series guidance documents, NRC regulations, and regulatory guides.

Permitting deficiency documentation was succinct and cited appropriate regulatory requirements and NRC guidance to support the requested action. Deficiency letters contained the deficiency or the regulatory/safety issue to be addressed. The team determined that communication between TSC staff and the permittee to resolve any permitting deficiencies occurred by telephone or email. The team observed that the communications with permittees were well documented and maintained in the permitting files.

The licensee was required to implement and comply with security Orders. This included the requirement to properly mark all documents. The team determined through interviews with TSC staff and a review of the permit files, that documents were properly marked in accordance with the requirements of the Orders.

The licensee is also required to implement and comply with requirements of The Energy Policy Act of 2005, which includes, in part, the requirement to permit any location that contains greater than 100 discrete radium sources. The team determined through interviews with TSC staff and a review of the permit files that during the review period there was one permit issued, as required, to a Navy museum that possessed more than 100 discrete radium sources and that several other Navy museums were in the process of obtaining permits.

The last biennial inspection identified violations for failures: 1) to follow the NUREG-1556 guidance documents; 2) to document communications with permittees in the permit file; 3) to properly mark documents containing security information pursuant to the requirements of the Order; and 4) to issue a permit to Navy museums that possessed more than 100 discrete radium sources. Based on interviews with TSC staff and a review of the permittee files, the team determined that appropriate corrective actions had been implemented.

6.3 Conclusion

The inspection team concluded that technical permitting reviews performed by licensee staff were processed in a manner consistent with NRC licensing policies, procedures, and guidance. In addition, the team determined that the technical permitting reviews performed by licensee staff appropriately addressed health and safety issues.

7. **Status of Permitting Program**

7.1 Inspection Scope

The inspection team reviewed the status of the licensee's permitting process to verify that permitting actions were handled and processed as required. In evaluating these elements, the inspection team interviewed licensee staff, reviewed permittee files, and compared licensee permitting action metrics data to determine permitting program status. The inspection team also evaluated the effectiveness of the licensee's system for tracking permitting actions.

7.2 Observations and Findings

The inspection team determined that the licensee was responsible for 90 permittees at the two TSCs; 77 industrial or non-medical research permittees under the authority of the RASO and 13 medical permittees under authority of the NMCPHC. The inspectors noted that the licensee issued permits with a 10-year expiration date.

The inspection team determined that in the licensee's SOP manual, the NRSC proposed a limit of six months to issue amendments to permits, and 12 months to issue renewals and new permits. The SOP was previously approved by the NRC and was deleted from the license in November 2011. Although the SOP was removed as a condition of the license, the licensee committed to maintaining their program in accordance with NRC policies, procedures, guidance, and regulations. The last biennial inspection identified a violation for failure to issue permit actions within the time frames approved by the NRC. The team confirmed through interviews with TSC staff and a review of the permit files that permit reviews were completed within the approved time frames. The team also determined that the time frames established by the NRSC were adequate and did not pose a risk to the licensee's ability to protect the health and safety of the licensee staff or the public.

The inspection team observed that the RASO tracks "time in house" for permitting timeliness, instead of the total time it takes to complete the permitting process. The

licensee “stops the clock” once a request for additional information is sent to the permittee. At the time of the inspection, the licensee had 13 pending permitting actions. Permitting actions were subsequently assigned to the RPM with the responsibility for the oversight of that particular permittee/site. There were no permitting actions that exceeded the timeliness goals established by the NRSC during the review period.

During the review period, it was identified that some permits, primarily industrial radiography, did not contain maximum possession limits in accordance with an NRC memorandum dated January 27, 2010. The team discussed this policy with the licensee and determined that the licensee had not received the January 27, 2010, memorandum. Subsequently on January 24, 2013, the NRC sent a letter to all MMLs notifying them of the change in the licensing process. The inspection team determined through interviews with TSC staff, that the licensee had implemented a process to establish maximum possession limits on all of their permits. The team reviewed several permits that required maximum possession limits and confirmed the permits contained the specified information in accordance with the January 24, 2013, letter.

A list of permit casework files reviewed is included in Appendix A.

7.3 Conclusion

The inspection team concluded that the licensee processed permitting actions in accordance with its timeliness goals. The team determined that the process for reviewing and issuing permitting actions by the licensee was adequate.

8. **Decommissioning Oversight Program**

8.1 Inspection Scope

The inspection team reviewed the Navy’s oversight of decommissioning activities at permitted sites. The scope of the activities examined included: the technical quality of inspections; amendments to permits for decommissioning sites; reviews of decommissioning related documents and correspondence; tracking decommissioning progress at sites where decommissioning is in progress or under consideration; and decommissioning timeliness milestones. The team evaluated these elements through discussions with the RASO technical staff and supervisors, review of documents, and observations made at permitted sites where decommissioning activities were being conducted or considered. The team did not review decommissioning activities for facilities designated for closure under the authority of the BRAC process.

8.2 Observations and Findings

The team reviewed activities and/or documentation related to five permitted sites in various stages of decommissioning. The sites included the Naval Research Laboratory, Chesapeake Beach, Maryland; the Naval Surface Warfare Center Dahlgren Division, Dahlgren, Virginia; the Space and Naval Warfare Systems Center Pacific, San Diego, California; the Naval Postgraduate School, Monterey, California; and the Naval Air Warfare Center, China Lake, California.

The inspection team determined that decommissioning activities at the Dahlgren, Virginia, and the Chesapeake Beach, Maryland, facilities were being conducted in accordance with approved decommissioning plans incorporated into the Navy's license. The activities were initiated on June 2, 2010, at the Dahlgren, Virginia, facility, and on January 5, 2011, at the Chesapeake Beach, Maryland, facility, with onsite work performed by the same contractor at both sites. An EPM provided periodic onsite oversight of the decommissioning activities with technical support from representatives from each of the commands. Based on discussions with the EPMs and a review of documents, the team determined that the direct oversight of the onsite decommissioning activities was thorough and ensured the onsite activities were completed in accordance with the decommissioning plan requirements. Although the active onsite portion of the decommissioning was accomplished within a few months at each of the sites, decommissioning at the two sites had not been completed because the contractor had not provided the complete final status survey reports to the RASO, indicating that the facilities were suitable for release in accordance with the criteria in the decommissioning plan and NRC regulations. Therefore the licensee could not certify the disposition of licensed materials at these sites. Alternatively, the licensee did not request an alternative schedule for the completion of decommissioning at these sites. The failure to complete decommissioning activities within 24 months following initiation of decommissioning activities is a violation of the requirements in 10 CFR 30.36(h)(1).

The inspection team reviewed the results of inspections conducted by the RPMs at the Space and Naval Warfare Systems Center Pacific, San Diego, California; the Naval Postgraduate School, Monterey, California; and the Naval Air Warfare Center, China Lake, California. The team confirmed that principal activities with licensed materials were no longer conducted at these facilities, and there was no active decommissioning in progress. The RPMs conducted inspections with the aid of their general inspection checklists and the inspections appeared thorough and complete. Inspection results indicated that the permitted material remaining at the facilities would not allow the facilities to be released for unrestricted use without additional decommissioning activities.

The inspection team noted that on September 12, 2011, the NRSC transmitted a letter to the Space and Naval Warfare Systems Center Pacific, San Diego, California, that acknowledged they had permanently ceased all activities with licensed material. The NRSC transmitted a similar letter to the Naval Postgraduate School, Monterey, California, on September 17, 2010, that acknowledged they had permanently ceased all activities with licensed material. Because the Navy had decided to permanently cease principal activities with licensed materials at sites unsuitable for release for unrestricted use, in accordance with 10 CFR 30.36(d)(2), the licensee was required to provide notification to the NRC in writing of these occurrences within 60 days and either begin decommissioning of each site so that the site would be suitable for release in accordance with NRC requirements or submit, within 12 months of notification, a decommissioning plan and begin decommissioning upon approval of that plan. The licensee may request an extension to the time periods within 30 days of these occurrences as allowed in 10 CFR 30.36(e). The failure to notify the NRC in writing within 60 days of the decision to permanently cease principal activities at two sites that were not suitable for release for unrestricted use and the failure to either decommission

or submit a decommissioning plan for the Naval Postgraduate School, Monterey, California, site is a violation of the requirements in 10 CFR 30.36(d)(2).

The inspection team also reviewed decommissioning-related activities at the China Lake, California, test ranges through direct observations at the site, examination of relevant documents, and discussions with one RPM. Based on the onsite observations and information from document reviews and interviews, the team determined that although the test ranges were actively used for various defense testing purposes, principal activities with permitted material were no longer being conducted on these ranges. The team also determined that there was residual depleted uranium contamination and other radiological contaminants (notably radium-226) in many areas throughout the base, regardless of whether they were active or inactive. The Navy staff with access to these areas had received sufficient training to avoid contaminated areas. Furthermore, access to these areas appeared to be well controlled. The team noted that decommissioning activities at this facility were complicated due to the enormous size of the facility (approximately one million acres) and the presence of unexploded ordnance within some of the ranges. The licensee was in the process of developing a historical radiological assessment and an alternate decommissioning schedule for this facility.

Based on discussions with RPMs and their supervisor, the inspection team discussed the manner in which permits were amended for sites in some phase of decommissioning. The inspection team noted that for the sites in San Diego, California, and Monterey, California, the permits were amended to reflect that the facilities were in a decommissioning status. This change required that these facilities were inspected annually. The inspection team confirmed that the inspections were being conducted within the required timeframe.

For the China Lake, California; Dahlgren, Virginia; and Chesapeake Beach, Maryland; facilities, the permits were not amended to indicate a decommissioning status. The inspection team determined that the RAD-010 Manual did not appear to specifically require permit amendments for decommissioning, and noted that there were permitting differences at the decommissioning sites. In addition, based on recent radiological scoping measurements at the China Lake, California, site, the licensee identified additional contaminated areas not specifically identified on the permit. The licensee staff considered amending the permit to reflect this additional information.

The inspection team determined that the licensee staff had drafted a decommissioning process procedure to be incorporated into its SOP manual.

A list of decommissioning casework files reviewed is included in Appendix C.

8.3 Conclusion

The inspection team concluded that the licensee's decommissioning inspection program was adequate to ensure that a thorough assessment of the sites was considered and the findings appropriately documented. The team noted that although permit amendments at decommissioning facilities were properly prepared, the internal guidance documents

did not provide sufficient information to determine when decommissioning amendments were required.

The inspection team determined that the administrative processes relating to decommissioning timeliness were not conducted in full compliance with NRC regulations. The inspection team identified two SL IV violations: 1) a failure to provide timely written notice to the NRC after permanently ceasing licensed activities at two permitted sites; and 2) a failure to timely complete decommissioning activities at two permitted sites. The inspection team also noted that the licensee had initiated measures to address decommissioning timeliness. The violations are cited in the enclosed Notice of Violation.

9. Allegation and Incident Handling Programs

9.1 Inspection Scope

The inspection team reviewed the licensee's program for handling allegations and responding to incidents. This included a determination of the applicability of NRC reporting requirements, the effectiveness of the licensee in handling allegations and responding to incidents, and the status of any open allegations. In evaluating this program, the inspection team utilized the MML's responses to the questionnaire sent to the licensee prior to the inspection, and interviews with personnel. In addition, the inspection team assessed the communication between the TSCs and the NRSC to determine how allegations were communicated to the NRSC.

9.2 Observations and Findings

The inspection team noted that the licensee received three allegations during the review period. The team reviewed the licensee's handling of the allegations and determined that their process was in accordance with the licensee's procedures and the terms and conditions of the MML.

The inspection team noted the licensee's SOP manual had been revised and approved by the NRSC November 2, 2012, and that it included revisions to Chapter 8, "Allegations." The revised SOP did not include specific guidance for investigation or confirmation of the validity of allegations; however, it required the licensee to submit all allegations to the office of the Navy Inspector General (NAVINSGEN). The NAVINSGEN reviewed the information and determined the appropriate investigator to conduct the investigation, which may include the RASO. While the revised SOP did not provide specific guidance or instruction for completing allegation investigations, qualified RPMs received allegation training on an annual basis. The team observed that the licensee could benefit from providing allegation training to newly hired personnel early in the qualification process.

The licensee reported two incidents involving radioactive material during the review period, one involved lost or missing sources, and one involved damaged and leaking sources. The team noted that the NRC Region I office was notified of these events. The

NRC's Nuclear Materials Event Database (NMED) and License Event Reports (LERs) database were also reviewed for completeness.

The following LER and events were reviewed and closed during this review:

1. LER 2011-022 (NMED #110661): On or about December 13, 2011, an In Flight Blade Inspection System (IBIS) device containing an 18.5 Megabecquerel (MBq) (500 microcurie (uCi)) strontium-90 (Sr-90) source was lost during a training flight between Marine Corps Air Station Miramar and Marine Corps Base Camp Pendleton. The most likely disposition was in the ocean between the two bases. Several unsuccessful extensive searches were made to recover the unit. No further recovery efforts were planned. Aircrews were directed to conduct post flight inventories and an engineering investigation was ordered to identify the failure mode. The licensee conducted a comprehensive critique of IBIS pressure indicator incidents and implemented an improvement plan.
2. NMED #120097: On January 11, 2012, General Nucleonics (GN) reported the receipt of damaged IBIS devices from the Navy. GN received 22 boxes containing IBIS devices, with each device containing an 18.5 MBq (500 uCi) Sr-90 source. When the packages were opened, it was discovered that 11 devices were damaged and five had removable radioactive contamination above 185 Bq (0.005 uCi). Leak test results ranged from 4,810 to 14,060 Becquerel (0.13 to 0.38 uCi). All devices were placed in sealed bags and then into a glove box. Source receiving and testing areas were checked for contamination and none was identified. It was determined that damage had occurred to the top of the indicators, the source retaining rods were bent from their normal vertical positions, and the source capsules had been damaged. GN plans to dispose of the devices through a radioactive waste broker. Although this report involved GN, the licensee's corrective actions included improved packaging of the devices for return shipments.
3. The inspection team also reviewed the licensee's response to two events that involved the loss of generally licensed devices reported to the RASO by permittees. Although the devices were not specifically permitted, the licensee reviewed the reports and provided guidance to permittees regarding corrective actions. The team reviewed the licensee's actions, found them to be adequate, and determined that these two events were closed.

The inspection team determined that there were no incidents identified during the inspection that impacted public health and safety or the environment during the review period.

9.3 Conclusion

The NRC inspection team concluded that the licensee's incident and allegation reporting was conducted in a manner that was in accordance with regulatory requirements. The team determined that the licensee could benefit by providing allegation training for new staff earlier in the qualification process.

10. National Source Tracking System (NSTS) Program

10.1 Inspection Scope

The inspection team reviewed the licensee's program for updating the NSTS. The review included an evaluation of: how licensee personnel identified sources of concern; which personnel were responsible for entering the information into NSTS; the method used to enter the information into the NSTS database; and how the Navy communicated with the NRC regarding NSTS matters. The team assessed communications between the permittees and RASO to evaluate the effectiveness and timeliness of updates to the NSTS.

10.2 Observations and Findings

The inspection team observed that the Navy computer system did not allow the RPMs to download the required certificates necessary to access the NRC's NSTS computer database. Therefore, changes/corrections were sent via facsimile to the NSTS Help Desk using NRC Form 748.

The licensee had three individuals who were credentialed and authorized to act on behalf of the licensee and update the NSTS. All permittees received an email request from the authorized licensee staff to update their respective NSTS information in early January of each year. The authorized licensee personnel subsequently transferred the permittee data to the NSTS via facsimile during the annual reconciliation effort prior to the January 31st deadline each year. The inspectors confirmed that the annual reconciliation was completed by January 31, 2013.

10.3 Conclusion

The inspection team concluded that the licensee's program for maintaining and updating the NSTS was adequate and implemented effectively.

11. NRC Independent Inspections of Licensee Permitted Facilities

11.1 Inspection Scope

During the review period, the NRC conducted independent inspections of licensee permitted facilities to assess the adequacy of their radiation safety programs and compliance with the NRC regulations and the MML.

11.2 Observations and Findings

During the period from June 2011, through January 2013, the NRC staff inspected 12 licensee locations. The NRC inspections focused on programs that the NRC had not recently inspected, and permittees that posed higher potential health and safety risks. The primary program codes inspected by the NRC included the following: one 2110 (medical institution – broad scope), two 2121 (medical institution - limited scope written directive not required), four 3320 (Industrial radiography – Temporary Job Sites), two

3510 (Irradiators Self Shielded < or = to 10,000 Curies), one 3612 (Research and Development Type C Broad Scope), and two 3900 (Decommissioning of Byproduct Facilities). Six of the inspected permittees also had a secondary program code of 1000 (additional security requirements). With the exception of the facilities undergoing decommissioning, no violations were identified during the inspections. The violation for the decommissioning facilities is captured in Section 8.0, Decommissioning Oversight Program.

The team noted that the last independent inspection conducted at the Space and Naval Warfare Systems Center Pacific, San Diego, CA, by the NRC, identified violations for the failure to control contamination and follow applicable US Department of Transportation requirements when material was transported to another Navy location. The inspection team confirmed through a follow-up NRC inspection at the Space and Naval Warfare Systems Center Pacific, interviews with permittee staff, and a review of the permit files that corrective actions were implemented.

A list of independent NRC inspections is included in Appendix D.

11.3 Conclusion

The inspection team concluded that licensee and permittee activities were conducted in a manner that protected the health and safety of the licensee staff and the public, based on the results of the NRC's independent inspections. The team determined that the licensee adequately addressed any violations that were identified during previous NRC independent inspections of permittees.

12. **Exit Meeting**

A preliminary exit meeting to discuss the overall scope and findings of the inspection was held on February 7, 2013. A final exit meeting was held with CAPT Davis-Urgo and Dr. Fragoso via telephone on March 6, 2013. No proprietary information was identified by the licensee.

13. SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Naval Radiation Safety Committee

- * RDML K. Slates, Chairman
- *+CAPT D. Davis-Urgo, Executive Secretary
- * CAPT L. Benevides, NAVSEA, member
- + L. Fragoso, Ph.D., Deputy Executive Secretary
- CDR C. Mitchell, BUMED, member
- * J. Quinn, member

Radiological Affairs Support Office

- *CDR G. Kahles, OIC
- S. Doremus, CHP, Ph.D., Director, Environmental Program
- L. Lowman, Director, Navy Low Level Waste Program
- T. Hart, RPD
- W. Prioleau, Lead RPM
- J. Black, RPM
- K. Huhn, RPM
- R. Erickson, RPM
- M. McCormack, RPM
- M. Earles, RPM
- J. Hogan, RPM
- V. Grason, RPM
- P. Huggins, RPM
- K. Ahmed, Ph.D., RPM
- A. Stambaugh, EPM

Navy and Marine Corps Public Health Center

- LCDR T. Miles, OIC
- D. Clark, RPM
- K. Ely, RPM

In addition, numerous licensee and permittee staff were interviewed during the independent inspections and accompaniments conducted by the NRC during the review period.

*Individuals present at preliminary exit meeting on February 7, 2013

+Individuals present at final exit meeting via teleconference on March 6, 2013

ITEMS OPENED, CLOSED, OR DISCUSSED

Opened

1. Failure to provide timely written notice to the NRC after permanently ceasing licensed activities at two permitted sites. SL IV NOV (Section 8.2)
2. Failure to timely complete decommissioning activities at two permitted sites. SL IV NOV (Section 8.2)

Closed

These items were identified in NRC Inspection Report No. 03029462/2011006 and closed during this biennial review.

1. Failure to update its regulations and procedures to reflect the most current NRC or other applicable regulations. SL IV NOV (Section 4.2)
2. Failure to properly document inspection results. SL IV NOV (Section 4.2)
3. Failure to conduct unannounced inspections. SL IV NOV (Section 5.2)
4. Failure to submit inspection reports to the NRSC within thirty days. SL IV NOV (Section 4.2)
5. Failure to conduct inspections at the intervals delineated in NRC inspection manuals. SL IV NOV (Section 5.2)
6. Failure to conduct annual inspector accompaniments. SL IV NOV (Section 3.2)
7. Failure to clearly describe and document deficiencies in the permitting process. SL IV NOV (Section 6.2)
8. Failure to develop, maintain and implement policies and procedures for proper handling and protection against unauthorized disclosure of physical protection information. SL IV NOV (Section 6.2)
9. Failure to utilize NRC guidance during the review of permit applications. SL IV NOV (Section 6.2)
10. Failure to permit museums possessing greater than 100 discrete radium sources. SL IV NOV (Section 6.2)
11. Failure to issue permitting actions within NRC approved timelines. SL IV NOV (Section 7.2)

These items were reviewed as part of NRC Inspection Report No. 03029462/2013001 and closed during this biennial review.

12. LER 2011-022 (NMED #110661) (Section 9.2)

13. NMED #120097 (Section 9.2)

INSPECTION PROCEDURES USED

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| IMC 2810 | Master Material License Inspection Program |
| IP 87129 | Master Materials Program |

LIST OF ACRONYMS

| | |
|-----------|--|
| BRAC | Base Realignment and Closure Commission |
| BUMED | Bureau of Medicine |
| CAPT | Captain |
| CDR | Commander |
| CFR | Code of Federal Regulations |
| CHP | Certified Health Physicist |
| EPD | Environmental Programs Division |
| EPM | Environmental Protection Manager |
| GN | General Nucleonics |
| IBIS | In Flight Blade Inspection System |
| IMC | Inspection Manual Chapter |
| LER | License Event Report |
| LOU | Letter of Understanding |
| LT | Lieutenant |
| LCDR | Lieutenant Commander |
| MBq | Megabecquerel |
| MML | Master Material License |
| NAVINSGEN | Navy Inspector General |
| NAVSEA | Naval Sea Systems Command |
| NAVY | Department of the Navy |
| NMCPHC | Navy and Marine Corps Public Health Center |
| NMED | Nuclear Materials Event Database |
| NRC | Nuclear Regulatory Commission |
| NRSC | Naval Radiation Safety Committee |
| NSTS | National Source Tracking System |
| OIC | Officer In Charge |
| ORDERS | NRC Order EA-05-090, "Order Imposing Increased Controls," dated 11/14/05, and NRC Order EA-07-305, "Order Imposing Fingerprinting and Criminal History Records Check for Unescorted Access to Certain Radioactive Material," dated 12/5/07 |
| RAD-010 | Navy RASO Radiation Safety Manual |
| RDML | Rear Admiral |
| RASO | Radiological Affairs Support Office |
| RASP | Radiological Affairs Support Program |

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|-------|-------------------------------|
| RPD | Radiation Protection Director |
| RPM | Radiation Protection Manager |
| SL | Severity Level |
| SOP | Standard Operating Procedure |
| Sr-90 | Strontium-90 |
| TAT | Technical Assistance Team |
| TSC | Technical Support Center |
| uCi | Microcuries |
| USMC | United States Marine Corps |

LIST OF APPENDICES

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| Appendix B | Inspection Casework Reviews |
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| Appendix D | List of Independent NRC Inspections and Inspector Accompaniments |

APPENDIX A

PERMIT CASEWORK REVIEWS

RADIOLOGICAL AFFAIRS SUPPORT CENTER

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| File No.: 1 | |
| Permittee: USS George Washington | Permit No.: 59-21412-X1NP |
| Type of Action: Amendment | Date Issued: June 1, 2012 |
| File No.: 2 | |
| Permittee: NASC RADM William A. Moffett Bldg. | Permit No.: 19-00019-W2NP |
| Type of Action: Amendment | Date Issued: August 25, 2011 |
| File No.: 3 | |
| Permittee: National Naval Aviation Museum | Permit No.: 09-0432A-D1NP |
| Type of Action: New | Date Issued: March 7, 2011 |
| File No.: 4 | |
| Permittee: Naval Surface Warfare Center (NEODTD) | Permit No.: 19-42794-A1NP |
| Type of Action: Renewal | Date Issued: August 8, 2011 |
| File No.: 5 | |
| Permittee: Carderock Division | Permit No.: 19-00167-E1NP |
| Type of Action: Amendment | Date Issued: December 10, 2012 |
| File No.: 6 | |
| Permittee: Pearl Harbor Naval Shipyard | Permit No.: 53-32253-A1NP |
| Type of Action: Amendment | Date Issued: October 25, 2012 |
| File No.: 7 | |
| Permittee: Naval Sea Systems Comm. Det. | Permit No.: 45-45650-N1NP |
| Type of Action: Renewal | Date Issued: January 11, 2013 |
| File No.: 11 | |
| Permittee: Puget Sound Naval Shipyard & Intermediate Maintenance Facility | Permit No.: 46-4523A-XINP |
| Type of Action: Termination | Date Issued: January 17, 2013 |
| File No.: 12 | |
| Permittee: Naval Air Warfare Center Weapons Division | Permit No.: 04-60530-B1NP |
| Type of Action: Termination | Date Issued: February 22, 2012 |
| File No.: 13 | |
| Permittee: Marine Corps Base, Hawaii | Permit No.: 53-00318-J1NP |
| Type of Action: Termination | Date Issued: January 19, 2012 |

File No.: 14
Permittee: Camp Pendleton
Type of Action: Renewal

Permit No.: 04-00081-B1NP
Date Issued: December 20, 2011

Navy and Marine Corps Public Health Center (NMCPHC)

File No.: 8
Permittee: Naval Medical Center
Type of Action: Amendment

Permit No.: 04-00259-11NP
Date Issued: February 9, 2012

File No.: 9
Permittee: Naval Medical Center Portsmouth
Type of Action: Renewal

Permit No.: 45-00183-11NP
Date Issued: June 21, 2012

File No.: 10
Permittee: Walter Reed National Military Medical Center
Type of Action: Renewal

Permit No.: 19-00168-21JP
Date Issued: June 21, 2012

APPENDIX B
INSPECTION CASEWORK REVIEWS
RADIOLOGICAL AFFAIRS SUPPORT CENTER

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| File No.: 1 Permittee: Naval Research Laboratory-Washington, DC Permit Type: Research and Development Broad Scope Type A | Permit No.: 08-00173-E1ND Date Inspected: 8/1/2012 |
| File No.: 2 Permittee: Naval Research Laboratory-Washington, DC Permit Type: Research and Development Broad Scope Type A | Permit No.: 08-00173-E1ND Date Inspected: 2/4/2011 |
| File No.: 3 Permittee: NAVIMFAC PACNORWEST Permit Type: Gamma Radiography | Permit No.: 46-4523A-A-2NP Date Inspected: 3/28-30/2012 |
| File No.: 4 Permittee: Naval Shipyard-Norfolk Permit Type: Gamma Radiography | Permit No.: 45-42158-A1NP Date Inspected: 10/2-5/2012 |
| File No.: 5 Permittee: Naval Shipyard-Portsmouth Permit Type: Gamma Radiographer | Permit No.: 28-39040-A1NP Date Inspected: 8/22/2012 |
| File No.: 6 Permittee: Trident Refit Facility Permit Type: Gamma Radiography | Permit No.: 10-44466-A1NP Date Inspected: 3/27-28/2012 |
| File No.: 7 Permittee: Naval Shipyard-Bremerton, WA Permit Type: Gamma Radiography | Permit No.: 46-4523A-A1NP Date Inspected: 6/18-22/2012 |
| File No.: 8 Permittee: Surface Warfare Officers School Permit Type: Gamma Radiography | Permit No.: 12-3203A-A1NP Date Inspected: 8/15/2012 |
| File No.: 9 Permittee: NSY and IMF Pearl Harbor Permit Type: Gamma Radiography | Permit No.: 53-32253-A1NP Date Inspected: 1/24-2/2/12 |
| File No.: 10 Permittee: Naval Shipyard-Norfolk Permit Type: Gamma Radiography | Permit No.: 45-42158-A1NP Date Inspected: 11/2011 |

File No.: 11

Permittee: Naval Surface Warfare Center

Permit Type: Gamma Radiography

Permit No.: 19-42794-A1NP

Date Inspected: 10/25/2012

NAVY AND MARINE CORP PUBLIC HEALTH CENTER

File No.: 12

Permittee: Naval Medical Research Center

Permit Type: Research Laboratory (Non-human use)

Permit No.: 19-32398-42NP

Date Inspected: 3/26-30/2012

File No.: 13

Permittee: Naval Medical Center-San Diego

Permit Type: Nuclear Medicine-Limited Scope (including HDR)

Permit No.: 04-00259-11NP

Date Inspected: 11/14-17/2011

File No.: 14

Permittee: WRNMMC

Permit Type: Nuclear Medicine-Broad Scope

Permit No.: 19-00168-21JP

Date Inspected: 7/30-8/3/2012

File No.: 15

Permittee: Naval Hospital-Guam

Permit Type: Nuclear Medicine-Limited Scope

Permit No.: 56-68096-11NP

Date Inspected: 12/11-13/2012

APPENDIX C

DECOMMISSIONING CASEWORK REVIEWS

RADIOLOGICAL AFFAIRS SUPPORT CENTER

File No.: 1

Permittee: Space and Naval Warfare Systems Center Pacific
Permit Type: Decommissioning of Byproduct Material

Permit No.: 04-66001-D1NP
Dates Inspected: 10/25/2012
1/16/2013

File No.: 2

Permittee: Naval Postgraduate School
Permit Type: Decommissioning of Byproduct Material

Permit No.: 04-62271-D1NP
Dates Inspected: 11/27-30/12

File No.: 3

Permittee: Naval Research Laboratory, Chesapeake Beach
Permit Type: Removal Action

Permit No.: 08-00173-E1NP
Dates Inspected: various

File No.: 4

Permittee: Naval Surface Warfare Center Dahlgren Division
Permit Type: Removal Action

Permit No.: 04-62271-D1NP
Dates Inspected: various

File No.: 5

Permittee: Naval Air Warfare Center, China Lake
Permit Type: Depleted Uranium Munitions Distribution & Storage

Permit No.: 04-60530-L1NP
Dates Inspected: 3/21-25/11

APPENDIX D

LIST OF INDEPENDENT NRC INSPECTIONS AND INSPECTOR ACCOMPANIMENTS

Independent Inspections:

Naval Medical Center - Guam
(Permit No 56-68096-11NP)
NRC Inspection No. 03029462/2011011
Clear inspection

Regional Support Group - New London, CT
(Permit No. 06-68316-C1NP)
NRC Inspection Nos. 03029462/2011012 & 2011013
Clear inspection

Naval Medical Center Portsmouth, VA
(Permit No. 45-00813-11NP)
NRC Inspection Nos. 03029462/2012001 & 2012002
Clear inspection

Great Lakes Training Center - Great Lakes, IL
(Permit No. 12-3203A-A1NP)
NRC Inspection Nos. 03029462/2012003 & 2012005
Clear inspection

Naval EOD Unit - Indian Head, MD
(Permit No. 19-0464A-A1NP)
NRC Inspection Nos. 03029462/2012004 & 2012006
Clear inspection

NNSY TJS – Philly Navy Yard, Philadelphia, PA
(Permit No. 45-42158-A1NP)
NRC Inspection No. 03029462/2012007
Clear inspection

Trident Refit Facility – Kings Bay, GA
(Permit No. 10-44466-A1NP)
NRC Inspection Nos. 03029462/2012008 & 2012014
Clear inspection

Naval Hospital – Jacksonville, FL
(Permit No. 09-00232-11NP)
NRC Inspection No. 03029462/2012009
Clear inspection

Pearl Harbor Naval Shipyard/ RADIAC Calibration Laboratory - Pearl Harbor, HI
(Permit Nos. 53-32253-A1NP; 53-32253-C1NP; 53-32253-J1NP; 53-00318-J1NP)
NRC Inspection Nos. 03029462/2012012 & 03029462/2012015
Clear inspection

Navy Region Southwest/ Naval Shipyard and Intermediate Maintenance Facility/Space and
Naval Warfare Center Systems Center Pacific - San Diego, CA
(Permit Nos. 46-4523A-C1NP; 04-66001-E1NP; 04-00242-Z1NP)
NRC Inspection No. 03029462/2012013 & 2012016
Clear inspection

Naval Air Warfare Center Weapons Division, China Lake, CA
(Permit No. 04-60530-L1NP)
NRC Inspection No. 03029462/2012011
Inspection results included with biennial report no. 03029642/2013001

Naval Postgraduate School, Monterey, CA
(Permit No. 04-62271-D1NP)
NRC Inspection No. 03029462/2012010
Inspection results included with biennial report no. 03029642/2013001

Accompaniments:

Naval Research Facility – Washington, DC (3 RASO Inspectors)
(Permit No. 08-00173-E1NP)

Norfolk Naval Shipyard - Norfolk, VA (1 RASO Inspector/1 Trainee)
(Permit No. 45-42158-A1NP)

Walter Reed National Medical Center - Bethesda, MD (3 NMCPHC Inspectors)
(Permit No. 19-00168-21NP)

Portsmouth Naval Shipyard - Kittery, ME (1 RASO Inspector)
(Permit No. 28-39040-A1NP)