



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
475 ALLENDALE ROAD – SUITE 102
KING OF PRUSSIA, PA 19406-1415

JULY 19, 2023

Mark Sinder
Department of the Navy
OPNAV N4I
2000 Navy Pentagon
Washington, DC 20350-2000

SUBJECT: DEPARTMENT OF THE NAVY - NRC INSPECTION NO. 030-29462/2023002

Dear Mark Sinder:

This letter refers to the inspection conducted on June 13-15, 2023, at Naval Weapons Station Yorktown, VA. This inspection examined activities conducted under your license as they relate to public health and safety, and to confirm compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel. The enclosure documents the inspection and the results of the inspection which were also discussed with you and members of your staff on June 15, 2023.

Within the scope of this inspection, no violations were identified.

In accordance with Title 10 of *The Code of Federal Regulations* (CFR) 2.390 of the NRC's "Agency Rules of Practice and Procedure", a copy of this letter and your response, if you choose to provide one, 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 Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

M. Sinder

2

If you have any questions regarding this matter, please contact Steve Shaffer of my staff at 610-337-5225 or via electronic mail at steve.shaffer@nrc.gov.

Thank you for your cooperation.

Sincerely,

Christopher G. Cahill

Digitally signed by Christopher
G. Cahill
Date: 2023.07.19 12:30:11 -04'00'

Christopher G. Cahill, Chief
Commercial, Industrial, R&D
and Academic Branch
Division of Radiological Safety and Security
Region I

Docket No. 030-29462
License No. 45-23645-01NA

Enclosure:
Inspection Report 030-29462/2023002

SUBJECT: DEPARTMENT OF THE NAVY - NRC INSPECTION NO. 030-29462/2023002
DATED JULY 19, 2023

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SUNSI Review Complete: SShaffer

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U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection No. 2023002
Docket No. 030-29462
License No. 45-23645-01NA
Licensee: Department of the Navy
Location: Chief of Naval Operations (N452-RCO)
Energy and Environmental Readiness Division (N45)
Radiological Controls & Health
2000 Navy Pentagon
Washington, DC 20350-2000
Locations Inspected: Radiological Affairs Support Office
Naval Weapons Station
Yorktown, VA
Independent NRC inspections of permittees listed in Appendix C
Inspection Dates: June 13, 2023, through June 15, 2023, exit
Inspectors: Steve Shaffer, Senior Health Physicist, Team Leader
Commercial, Industrial, Research, Development and Academic Branch, RI
Jason Dykert, Health Physicist
Materials Inspection Branch, RIV
Storm Veunephachan, Health Physicist
Decommissioning, ISFSI and Reactor Health Physicist Branch, RI
Juan Ayala, Health Physicist
Commercial, Industrial, Research, Development and Academic Branch, RI

Approved By: **Christopher G. Cahill** Digitally signed by Christopher G. Cahill
Date: 2023.07.19 12:29:14 -04'00'

Christopher Cahill, Chief Date
Commercial, Industrial, Research, Development and Academic Branch
Division of Radiological Safety and Security
Region I

EXECUTIVE SUMMARY

U.S. Department of the Navy
NRC Inspection Report No. 030-29462/2023002

This announced U.S. 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 24, 2021, through June 12, 2023, were reviewed during this inspection. In evaluating the licensee's overall performance, the inspectors conducted interviews with licensee staff, evaluated the licensee's response to an NRC questionnaire, reviewed documents related to Master Materials License (MML) 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 team's assessments of the program areas are summarized below.

Management Oversight

The inspection team concluded that the Naval Radiation Safety Committee (NRSC) had maintained centralized control over the radioactive materials program and that it executed its responsibilities and provided adequate oversight of the 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 its radioactive material program and was making progress toward 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 protect the public health and safety. Documented inspection findings were well founded, appropriately documented, and communicated to permittees in a timely manner. The team determined that

licensee inspectors reviewed violations that were identified during previous inspections, 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 and findings communicated to the permittees 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 addressed health and safety issues.

Status of Permitting Program

The inspection team concluded that the licensee processed permitting actions in accordance with its NRC-approved 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 licensing and inspection program was adequate to ensure that a thorough assessment of the sites was performed, and findings were appropriately documented.

Allegation and Incident Handling Programs

The NRC inspection team concluded that the licensee's incident and allegation reporting was conducted in accordance with regulatory requirements. The team concluded that events were reported and corrective actions were appropriate.

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 was effectively implemented.

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.

REPORT DETAILS

1. Program Overview

The licensee is authorized under a MML to issue radioactive materials permits and to inspect U.S. Navy and Marine Corps permittees throughout the United States. The licensee oversees 39 permittees at the Radiological Affairs Support Office (RASO). 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 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. The RASO is responsible for managing the radiation safety program under the MML for the non-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 delegated the authority for routine oversight of permitted activities to the RASO. The RASO 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 manual, revised on March 3, 2021. 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 staff; implementing the permitting, inspection, and enforcement programs; responding to events, incidents, and allegations; and maintaining effective communications with permittees under the MML.

The staff were also responsible for implementing the Letter of Understanding (LOU) between the Navy and the NRC. The LOU referenced policies and procedures that ensured consistency between the Navy and the NRC requirements. The LOU was last updated and executed August 13, 2019. The Navy policies and procedures described the protocols for: processing permits, conducting inspections, taking enforcement action, training 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-Navy RASO Radiation Safety Manual (RAD-010). The manual was last revised on June 1, 2019.

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 RASO'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 RASO's effectiveness in the implementation of the radiation safety program.

The inspection team reviewed the audit reports for 2021 and 2022, 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 RASO staff during each year; current RASO staffing and funding levels; RASO response to events and allegations; and adherence to Navy processes, policies, and procedures. The overall results for both audits were satisfactory, with minor 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 RASO newsletters, information notices, and annual radiation safety officer meetings, also referred to as community of practice training 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.

Conclusion

The inspection team concluded that the NRSC had maintained centralized control over the radioactive materials program and that it executed its responsibilities and provided adequate oversight of the 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) and Environmental Protection Managers (EPMs) 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 RASO, referred to as RPMs, were trained as both inspectors and permit reviewers.

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, the Navy was at full staffing which included seven fully qualified RPMs who independently performed inspections, two RPMs 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. Both RPMs in qualification are expected to complete their qualifications in the fall of 2023.

The OIC is an active duty member of the Navy and the position turns over approximately every three years. The last rotation occurred in the fall of 2022.

In accordance with the licensee's procedures, all qualified RASO staff members were required to be evaluated each year by licensee management while conducting an inspection. Through interviews of RASO management and staff and a review of records, the inspection team confirmed that since the last biennial inspection, all qualified RASO inspectors had been evaluated while conducting an inspection, as required. The team reviewed the qualification journals and interviewed the two newest qualified inspectors since the last inspection and determined that the qualification process was compatible to that of NRC Inspection Manual Chapter 1248. Inspector qualifications include individual and classroom training, on the job training, and an oral qualification board. The team noted that refresher training is also offered on an annual basis.

The RASO also directed the Environmental Programs Division (EPD), which is staffed with 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 seven EPMs.

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 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 reports, enforcement documents, and other records and correspondence associated with inspections that were conducted by licensee staff during the review period. The inspection team also interviewed licensee staff and managers associated with the licensee's inspection program. The scope of the inspection team's review included whether: inspection guidance was consistent with NRC guidance; inspection findings were well documented and well founded; inspection reports had appropriate licensee management review; inspections addressed previously identified inspection findings; inspection findings resulted in appropriate and prompt regulatory action and that permittee responses were appropriate; and whether supervisors performed accompaniments of each inspector annually. The list of the inspection casework files reviewed is provided in Appendix A.

4.2 Observations and Findings

During the review period, the RASO performed 33 inspections; some of these inspections were for permits with more than one usage code or type of permitted activity to be inspected. At the time of the inspection, the RASO had seven fully qualified RPMs to perform inspections and two members of the management staff had inspection qualifications and performed inspections on occasion. During the review period, an NRC inspector accompanied five RPMs and one individual in training during inspections. Additionally, four independent inspections performed by NRC inspectors (See Appendix C). Based on the independent inspections, accompaniments, as well as a review of RASO inspection casework files, overall the RASO RPMs were found to be highly competent and skilled inspectors that were very knowledgeable of the technical aspects and the health, safety, and security considerations of the activities that were permitted by the RASO.

Based on a review of the inspection casework files, the inspection team found that the RASO equivalent Form 591M Part 3 reports for health and safety portions of inspections were found to have thorough descriptions of the scope of permitted activities, permittee facilities and equipment, and the implementation of the permitted activities.

For inspections that resulted in violations, permittees were required to provide written responses. For the inspection casework files reviewed, permittee responses were prompt and contained appropriate detail to address the non-compliances and the actions taken to restore compliance and prevent recurrence of the non-compliance. In many cases, permittees identified the causal factors that led to the non-compliances. In all cases, the permittee responses were promptly reviewed by RASO for appropriateness. All RASO inspection casework files reviewed were found to have appropriate management review throughout the various stages of inspection report processing and issuance. All inspectors were accompanied by a supervisor annually during the review period.

For the inspection casework files reviewed that resulted in enforcement action, violations were well founded and technically sound. Each of the violations were thoroughly documented in sufficient detail to adequately describe the non-compliances and for the most part regulatory actions were appropriate and consistent with NRC's Enforcement Policy (Policy).

4.3 Conclusion

The inspection team concluded that inspection guidance was consistent with NRC guidance; inspection findings were well documented and well founded; inspection reports had appropriate management review; inspections addressed previously identified inspection findings; inspection findings resulted in appropriate and prompt regulatory action; permittee responses to inspection findings were appropriate; and supervisors performed accompaniments of each inspector annually.

5. **Status of Materials Inspection Program**

5.1 Inspection Scope

The inspection team reviewed the licensee's assigned inspection frequencies for permittees, timeliness for completing inspections, status of any overdue inspections, timeliness of the issuance of inspection reports, and protocols to reduce inspection intervals. In evaluating these elements, the inspection team interviewed licensee staff, reviewed permittee inspection casework files, and validated licensee inspection data to determine inspection program status.

5.2 Observations and Findings

The inspection team determined that the RASO maintained an inspection database to support the day-to-day management and planning of the inspection program. The inspection team determined that there were no overdue inspections at the time of the review. The inspection team found that during the review period, all routine inspections were conducted by the RASO within the appropriate inspection window.

The inspection team reviewed the timeliness of the issuance of RASO inspection findings to permittees and found that inspection reports were issued in a timely manner. All inspection reports reviewed, including those that involved complex inspection findings or enforcement actions, were issued to permittees significantly less than 30 days following the completion of the onsite inspection activities.

The inspection team found that through effective routine RASO inspection staff/management communications, changes to permittee inspection intervals, such as those to reduce inspection intervals based on permittee performance, enforcement actions, or other concerns, were discussed and implemented into the inspection schedule as appropriate.

5.3 Conclusion

The inspection team concluded that the licensee conducted routine and initial inspections in accordance with the inspection intervals described in NRC IMC 2800. The team also determined that inspection findings were communicated to the permittees in a timely manner. Processes were available to reduce inspection intervals based on permittee performance, significant enforcement, or other concerns.

6. **Technical Quality of Permitting**

6.1 Inspection Scope

The inspection team reviewed 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.

The inspection team assessed the technical quality of the permitting process by reviewing 14 permitting actions completed at RASO, including eight amendments and six renewals. A total of 75 actions were completed during the review period. The permitting actions were evaluated to ensure that applicable regulations and guidance documents were used. This evaluation included, but was not limited to: 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 licensee was responsible for 39 industrial permittees at RASO.

The inspection team determined that permits were issued in a timely manner in accordance with the license requirements, MML procedures, and NRC guidance documents. The review team determined that the NRSC had established goals to complete all permitting amendment actions within 180 days, and new applications, renewals, and terminations within 365 days.

There were seven fully qualified staff RPMs assigned to the RASO. There were also two RPMs in training. Each RPM was responsible for managing the permitting of specific commands. All completed reviews were peer-reviewed for administrative accuracy and completeness of permitting documents. A technical peer review of each permitting action was conducted by the lead RPM. RASO managers and the OIC reviewed and concurred

on each action, and the Executive Secretary of the NRSC signed all completed permitting actions and cover letters.

Deficiency documentation was succinct and cited appropriate regulatory requirements and NRC guidance to support the requested action. The team noted that communication between RASO staff and the permittee to resolve permitting deficiencies occurred by telephone or email. The team also noted that communications with permittees were well documented and maintained in the permitting files.

The list of permit casework files reviewed is found in Appendix B.

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 addressed health and safety issues and concluded that the licensee processed permitting actions in accordance with its NRC-approved timeliness goals. The team determined that the process for reviewing and issuing permitting actions by the licensee was adequate.

7. **Decommissioning Oversight Program**

7.1 Inspection Scope

The inspection team reviewed the licensee's oversight of decommissioning activities at permitted sites. The scope of this inspection included technical quality of inspections, amendments to decommissioning-related permits, issuance of recent decommissioning documents and correspondence, decommissioning activities completed since the last biennial inspection, and timeliness of decommissioning.

7.2 Observations and Findings

The inspection team reviewed the licensee's oversight of decommissioning activities at permitted sites. This included a review of licensing and inspection documentation and discussion with staff involved in decommissioning work.

Documentation for four decommissioning sites was reviewed. The sites were:

- Naval Surface Warfare Center Division, Dahlgren, VA
- Naval Surface Warfare Center Division, Crane, IN
- Naval Information Warfare Center Pacific, San Diego, CA
- Naval Post Graduate School, Monterey, CA

Decommissioning and/or license termination at the first two sites is complete. Documentation for these sites supported unrestricted release. Site surveys were performed if appropriate. The Naval Information Warfare Center Pacific in San Diego

and the Naval Post Graduate School in Monterey are undergoing decommissioning under an alternate decommissioning schedule.

Site visits were performed for sites undergoing remediation by Radiation Project Managers. Environmental Project Managers also performed site visits to accomplish contractor oversight. The results of these inspections were well documented in a timely fashion.

The Navy utilizes RASO Standard Operating Procedure (SOP): Radiation Protection Director (RPD)-014, Radiological Affairs Support Program (RASP) Decommissioning Inspection Standard Operating Procedure to delineate the policy and procedures for conducting decommissioning inspections, and SOP RPD-010, decommissioning Process for Naval Radioactive Material Permits (NRMPs) for decommissioning and termination licensing guidance.

Amendment No. 44 to the MML authorized an exemption to the 24 month requirement in 10 CFR 30.36(h) and granted an alternative schedule for permittees for the completion of decommissioning at any permitted site or separate building or outdoor area that do not involve groundwater contamination of no later than five years. It should be noted that this does not apply to the notification requirements under 10 CFR 30.36(d).

7.3 Conclusions

The inspection team concluded that the licensee's decommissioning licensing and inspection program was adequate to ensure that a thorough assessment of the sites was performed, and findings were appropriately documented.

8. Allegation and Incident Handling Programs

8.1 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 reviewed the procedures for responding to allegations and incidents and how they were communicated to the NRSC.

8.2 Observations and Findings

The inspection team noted that the licensee reported no allegations during the monitoring period. Allegations are referred to the Office of the Navy Inspector General for follow-up.

The team reviewed the licensee's SOP Manual and determined that the allegation SOP required that allegations be processed in accordance with the terms and conditions of

the MML. The inspection team determined the licensee's SOP Manual had been revised and approved by the NRSC on December 9, 2021, incorporating the observations from the previous NRC inspection. The SOP requires the Navy Inspector General (NAVINGEN) to notify the NRC project manager and to review the information and determine the appropriate investigator to conduct the investigation, which may include the RASO. While the SOP did not provide specific guidance or instruction for licensee staff to conduct allegation investigations, the review team determined that qualified RPMs and EPMs had received allegation training on an annual basis. Additionally, RASO SOP RPD-003, Revision 4, Section 9.c states that allegation follow-up would be performed as reactive inspections following the instructions provided in the NRC request.

The inspectors review of the SOP identified that section 304.11 Inaccurate and Incomplete Information requires that indication of submittal of incomplete and/or inaccurate information due to willful or careless disregard must be formally reported to the NRC as "wrongdoing" in accordance with Appendix D. Appendix D requires that the NRSC inform the NRC of any allegations in accordance with section 4.5.1 of the LOU between the NRC and Navy and report any suspected wrongdoing in accordance with section 4.7.1 of the LOU. The inspectors did not identify any cases where the NRC was not notified as required.

The licensee reported two incidents involving leaking generally licensed devices. The team determined that the NRC Region I office was notified of these events. The inspectors performed an inspection of EN 55813. No violations were identified during the inspection. The licensee had reported two incidents involving radioactive material during the previous review period, which involved lost or missing sources. Those incidents were reviewed and closed by the NRC.

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.

8.3 Conclusion

The NRC inspection team concluded that the licensee's allegation and incident reporting was conducted in accordance with regulatory requirements. The team concluded that events were reported and corrective actions were appropriate.

9. National Source Tracking System (NSTS) Program

9.1 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 that was used to enter the information into the NSTS database, and how the Navy communicated with the NRC regarding NSTS matters. The team assessed the communications

between the permittees and staff to evaluate the effectiveness and timeliness of updates to the NSTS.

9.2 Observations and Findings

The inspection team observed that in order to assure compliance with 10 CFR 20.2207, credentialed RASO staff members transmitted inventory records for certain radioactive sources in December of each year to specific commands under the MML. Each command verified the inventory and signed and returned a confirmation to a RASO. Upon receipt of the confirmation, MML staff compared and verified each command's inventory against the NSTS records. Adjustments or corrections were documented on an NRC Form 748 and submitted to the NSTS.

At the time of the inspection there were approximately 48 sources under the Navy MML that were being tracked in the NSTS.

The licensee maintained a hard copy of the reconciliation of sources for each command. Each record was coded to a specific command. The team reviewed a random selection of permittees which possessed sources tracked by the NSTS and confirmed that the licensee performed the required reconciliation in January 2022 and January 2023. In addition, the team reviewed a random sampling of Form 748's submitted to the NSTS by the Navy, which included sources that were received, transferred, and disposed. No concerns were noted.

At the time of the inspection, the licensee had nine individuals who were credentialed and authorized to act on behalf of the licensee and update the NSTS. There was no change to the licensee's SOP for making annual reports to the NSTS during the review period.

9.3 Conclusion

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

10. **NRC Independent Inspections of Licensee Permitted Facilities**

10.1 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 NRC regulations and the MML.

10.2 Observations and Findings

During the period from June 2021, through June 2023, the NRC staff inspected two licensee locations conducting safety and security inspections at both locations. The NRC

inspections focused on programs that the NRC determined to have a higher health and safety risk. No violations were identified during the inspections.

The list of independent NRC inspections is included in Appendix C.

10.3 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.

11. **Exit Meeting**

An exit meeting to discuss the overall scope and findings of the inspection was held on June 15, 2023.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Naval Radiation Safety Committee

- * Mark Sinder, NRSC Chair (via telephone)
- * CAPT G. Fairchild, Executive Secretary
- * LCDR J. Sullivan, NRSC

Radiological Affairs Support Office

- * E. Abkemeier, Division Head
- * K. Huhn, Lead RPM
- V. Grayson, RPM
- * R. Greene, RPM
- C. Hendrickson, RPM
- * D. Restrepo
- * C. Sawyer, RPM
- * B. Schilke, 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 exit briefing on June 15, 2023

ITEMS OPENED, CLOSED, OR DISCUSSED

Opened

NONE

Closed

NONE

Discussed

NONE

INSPECTION PROCEDURES USED

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

LIST OF ACRONYMS

ADAMS Agencywide Documents Access Management System
BRAC Base Realignment and Closure Commission
CDR Commander
CFR Code of Federal Regulations
EPD Environmental Programs Division
EPM Environmental Protection Manager
IMC Inspection Manual Chapter
LOU Letter of Understanding
MML Master Material License
NAVINGEN Navy Inspector General
NAVSEA Naval Sea Systems Command
NAVY Department of the Navy
NRC Nuclear Regulatory Commission
NRSC Naval Radiation Safety Committee
NRMP Naval Radioactive Material Permits
NSTS National Source Tracking System
OIC Officer In Charge
RAD-010 Navy RASO Radiation Safety Manual
RASO Radiological Affairs Support Office
RASP Radiological Affairs Support Program
RPD Radiation Protection Director
RPM Radiation Protection Manager
SOP Standard Operating Procedure

LIST OF APPENDICES

- Appendix A Inspection Casework Reviews
- Appendix B Permit Casework Reviews
- Appendix C List of Independent NRC Inspections and Inspector Accompaniments

APPENDIX A
INSPECTION CASEWORK REVIEWS
RADIOLOGICAL AFFAIRS SUPPORT OFFICE

File No.: 1
Permittee: United States Naval Academy
Permit No.: 19-00161-E1NP
Permit Type: Research and Development Type A Broadscope
Dates Inspected: 5/10-13/2022

File No.: 2
Permittee: Naval Surface Warfare Center, Crane Division
Permit No.: 13-00164-Q1NP/13-00164-T1NP
Permit Type: Irradiators, Radioactive Commodities Distribution and Use
Dates Inspected: 9/26/2022, and 4/26-28/2022

File No.: 3
Permittee: Naval Surface Warfare Center, Carderock Division
Permit No.: 19-00167-E1NP
Permit Type: Research and Development Type A Broadscope
Dates Inspected: 2/23-25/2022

File No.: 4
Permittee: Naval Research Laboratory, Chesapeake Bay Detachment
Permit No.: 08-00173-E1NP
Permit Type: Research and Development Type A Broadscope
Date Inspected: 10/26/2022

File No.: 5
Permittee: Naval Research Laboratory Detachment, Stennis Space Center
Permit No.: 08-00173-E1NP
Permit Type: Research and Development Type A Broadscope
Dates Inspected: 1/11-12/2023

File No.: 6
Permittee: USS Ronald Reagan (CVN 76)
Permit No.: 59-22178-X1NP
Permit Type: Source Material Standby (No Ops)
Dates Inspected: 4/13-15/2022

File No.: 7
Permittee: Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility
Permit No.: 53-32253-A1NP
Permit Type: Radiography (Fixed and Field Ops)
Dates Inspected: 7/11-15/2022

File No.: 8
Permittee: Portsmouth Naval Shipyard
Permit No.: 28-39040-A1NP
Permit Type: Radiography (Fixed and Field Ops)
Dates Inspected: 7/12-15/2021 and 8/10-12/2022

File No.: 9
Permittee: Norfolk Naval Shipyard
Permit No.: 45-42158-A1NP and 45-42158-C1NP
Permit Type: Radiography (Fixed and Field Ops)
Dates Inspected: 1/8-20/2023

File No.: 10
Permittee: Explosive Ordnance Disposal Training & Evaluation Unit 2
Permit No.: 45-43505-B1NP
Permit Type: General Industrial
Dates Inspected: 9/14-15/2022

File No.: 11
Permittee: Trident Refit Facility King's Bay
Permit No.: 10-44466-A1NP
Permit Type: Radiography (Fixed and Field Ops)
Dates Inspected: 7/ 6-7/2022

File No.: 12
Permittee: Puget Sound Naval Shipyard and Intermediate Maintenance Facility
Permit No.: 46-4523A-A1NP
Permit Type: Radiography (Fixed and Field Ops)
Dates Inspected: 8/17-19/2021

File No.: 13
Permittee: Navy Munitions Command Atlantic, Mayport, Florida
Permit No.: 45-47616-C2NP
Permit Type: Instrument Calibration Services
Dates Inspected: 2/14-16/2023

File No.: 14
Permittee: Naval Air Forces, U.S. Pacific Fleet
Permit No.: 04-57025-T2NP
Permit Type: Radioactive Commodities Distribution and Use
Dates Inspected: 2/10-11/2022

File No.: 15
Permittee: Marine Corps Logistics Command, Albany
Permit No.: 10-67004-T2NP
Permit Type: Radioactive Commodities Distribution and Use
Dates Inspected: 11/16-18/2022

APPENDIX B

PERMIT CASEWORK REVIEWS

RADIOLOGICAL AFFAIRS SUPPORT OFFICE

File No.: 1	Permittee: Naval Surface Warfare Center, Crane	Permit No.: 13-00164-W1NP
Type of Action: Renewal		Date Issued: 11/15/2022
File No.: 2	Permittee: Naval Surface Warfare Center, Crane	Permit No.: 13-00164-Q1NP
Type of Action: Renewal		Date Issued: 1/11/2023
File No.: 3	Permittee: Naval Research Laboratory	Permit No.: 08-00173-E1NP
Type of Action: Amendment		Date Issued: 7/15/2022
File No.: 4	Permittee: Naval Surface Warfare Center, Indian Head	Permit No.: 19-00174-W1NP
Type of Action: Renewal		Date Issued: 4/13/2022
File No.: 5	Permittee: Naval Shipyard Portsmouth NH	Permit No.: 28-39040-A1NP
Type of Action: Amendment		Date Issued: 6/3/2022
File No.: 6	Permittee: TRIDENT Refit Facility	Permit No.: 10-44466-A1NP
Type of Action: Amendment		Date Issued: 5/31/2023
File No.: 7	Permittee: Navy Munitions Command Atlantic	Permit No.: 45-47616-C1NP
Type of Action: Amendment		Date Issued: 12/2/2022
File No.: 8	Permittee: Naval Information Warfare Center Pacific	Permit No.: 04-66001-D1NP
Type of Action: Renewal		Date Issued: 4/25/2022
File No.: 9	Permittee: Naval Dosimetry Center	Permit No.: 19-48539-B1NP
Type of Action: Amendment		Date Issued: 11/14/2021
File No.: 10	Permittee: Naval Postgraduate School	Permit No.: 04-62271-D1NP
Type of Action: Renewal		Date Issued: 1/24/2022

File No.: 11
Permittee: Naval Postgraduate School
Type of Action: Amendment

Permit No.: 04-62271-D1NP
Date Issued: 2/25/2022

File No.: 12
Permittee: MDMC Production Plant Albany GA
Type of Action: Amendment

Permit No.: 10-61700-C2NP
Date Issued: 3/30/2023

File No.: 13
Permittee: Marine Corp Systems Command
Type of Action: Renewal

Permit No.: 45-67854-L1NP
Date Issued: 11/18/2022

File No.: 14
Permittee: Strategic Weapons Facility, Atlantic
Type of Action: Amendment

Permit No.: 10-68733-B1NP
Date Issued: 9/19/2022

APPENDIX C

LIST OF INDEPENDENT NRC INSPECTIONS AND INSPECTOR ACCOMPANIMENTS

Independent Inspections:

Norfolk Naval Shipyard – Norfolk, Virginia
(Permit No. 45-42158-A1NP)
NRC Inspection No. 03029462/2023001

Pearl Harbor Naval Shipyard – Pearl Harbor, HI
(Permit No. 52-32253-A1NP)
NRC Inspection No. 03029462/2022003

Pearl Harbor Naval Shipyard – Pearl Harbor, HI
(Permit No. 52-32253-C1NP)
NRC Inspection No. 03029462/2022003

Naval Surface Warfare Center – Carderock – Bethesda, MD
(Permit No. 19-00167-E1NP)
NRC Inspection No. 03029462/2022002

Accompaniments:

Naval Research Laboratory – Washington, DC (4 RASO Inspectors)
Permit No. 08-00173-E1NP
In-person

Portsmouth Naval Shipyard – Kittery, ME (2 RASO Inspectors)
Permit No. 19-00161-E1NP
In-person