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INSPECTOR GENERAL

U.S. Department of Defense

APRIL 30, 2025



(U) Audit Of DoD Management of Hazardous Waste Disposals In Japan

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INDEPENDENCE * INTEGRITY * EXCELLENCE * TRANSPARENCY





(U) Results in Brief

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(U) Audit of DoD Management of Hazardous Waste Disposals in Japan

April 30, 2025

(U) Objective

(CUI) The objective of the audit was to determine whether the Military Services in Japan provided oversight over and processed hazardous waste disposals in accordance with DoD requirements.

(U) Background

(U) Through the course of routine operations, the DoD generates hazardous waste, including paints, fuels, oils, and chemicals such as polychlorinated biphenyls (PCBs). To conduct hazardous waste disposals, the Defense Logistics Agency's (DLA) Disposition Services uses private contractors to manage and dispose of hazardous waste generated or held by the Military Services and other DoD entities. The Military Services can also dispose of hazardous waste through other arrangements.

(U) Findings

(U) Air Force personnel at Yokota Air Base in Japan did not properly store materials contaminated with hazardous waste. This occurred because the dedicated site for storing hazardous waste was full, and the Air Force did not have procedures in place for how to properly store hazardous waste outside of the established storage area at Yokota Air Base. The lack of sufficient storage for hazardous waste could lead to negative life, health, and safety outcomes.

(U) Findings (cont'd)

(U) In addition, the Air Force did not properly dispose of hazardous waste. Specifically, the Air Force gave a contractor materials containing hazardous waste for disposal without receiving an exception to the Japan Environmental Governing Standards requirement to use DLA Disposition Services. Air Force personnel gave the materials containing PCBs to a contractor because they believed that an exception to the Japan Environmental Governing Standards requirement was not needed. Although the Air Force did not use DLA Disposition Services, the waste was properly disposed of by a certified contractor.

(U) Without an approved exception, PCBs could be transferred to a contractor without a proper oversight method in place to ensure that the contractor follows the required transport and disposal requirements. This could potentially lead to the improper disposal of hazardous waste, which could negatively affect U.S. relations with Japan and cause harm to human health and the environment.

(U) Lastly, we issued a notice of concern in July 2023 identifying that Air Force officials at Yokota Air Base:

- (U) did not have the documentation necessary to identify or hire specialized staffing required to operate the combined heat and power plant;
- (U) did not have a spill response plan for a hazardous waste stream; and
- (U) shut off fire suppression systems for nine buildings containing aqueous film forming foam.

(CUI) In addition,



(U) Results in Brief

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(U) Audit of DoD Management of Hazardous Waste Disposals in Japan

(U) Recommendations

(U) We recommended that the Air Force officials develop and implement a plan for appropriately storing hazardous waste when the existing hazardous waste storage facility is full. In response to the notice of concern that we issued during the audit, the Air Force took action and we closed three of the four recommendations.

(U) Management Comments and Our Response

(U) Air Force officials agreed to:

- (U) develop and implement a plan for storing hazardous waste, including when the existing hazardous waste storage areas are full; therefore, the recommendations are resolved but will remain open; and
- (U) provided the latest version of the Spill Prevention and Response Plan; therefore, the recommendation is closed.

(CUI) The Assistant Secretary of Defense (Energy, Installations, and Environment) agreed

therefore, the remaining recommendation from the notice of concern is resolved and open.

(U) Please see the Recommendations Table on the next page for the status of recommendations.

(U) Recommendations Table

(U) Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
(U) Assistant Secretary of Defense (Energy, Installations, and Environment)		C.4	
(U) Commander of the 5th Air Force		A.1.a, A.1.b	
(U) Commander of the 374th Airlift Wing			C.1, C.2, C.3

(U) Note: The following categories are used to describe agency management's comments to individual recommendations.

- (U) Unresolved Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- (U) Resolved Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- (U) Closed The DoD OIG verified that the agreed upon corrective actions were implemented.



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OFFICE OF INSPECTOR GENERAL DEPARTMENT OF DEFENSE 4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

April 30, 2025

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT COMMANDER, 5TH AIR FORCE COMMANDER, 374TH AIRLIFT WING AUDITOR GENERAL, DEPARTMENT OF THE ARMY AUDITOR GENERAL, DEPARTMENT OF THE NAVY AUDITOR GENERAL, DEPARTMENT OF THE AIR FORCE

SUBJECT: (U) Audit of DoD Management of Hazardous Waste Disposals in Japan (Report No. DODIG-2025-088)

(U) This final report provides the results of the DoD Office of Inspector General's audit. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management's comments on the draft report when preparing the final report. These comments are included in the report.

(U) Of the six recommendations in this report, we consider three recommendations closed because management took action sufficient to address the recommendations.

(U) Of the three remaining recommendations, the Deputy Commander of the Pacific Air Forces for the 5th Air Force and the Assistant Secretary of Defense (Energy, Installations, and Environment) agreed to address the recommendations presented in the report; therefore, we consider the recommendations resolved and open. We will close the recommendations when you provide us documentation showing that all agreed-upon actions to implement the recommendations are completed.

(U) DoD Instruction 7650.03 requires that recommendations be resolved promptly. For the resolved recommendations, please provide us within 90 days your response concerning specific actions in process or completed on the recommendations. Send your response for the resolved recommendations to either for the resolved if unclassified or for the resolved recommendation SECRET.

(U) If you have any questions, please contact me at

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Richard B. Vasquez Assistant Inspector General for Audit Readiness and Global Operations

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(U) Introduction

(U) Objective

(U) The objective of the audit was to determine whether the Military Services in Japan provided oversight over and processed hazardous waste disposals in accordance with DoD requirements.¹

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(CUI) Before the announcement of the audit,



(U) Throughout the audit, we conducted multiple site visits to various DoD installations between November 2022 and April 2023. On July 27, 2023, because of a site visit to Japan in April 2023, we issued a notice of concern identifying multiple issues in Japan that could jeopardize health, life, and safety or were otherwise time sensitive and required immediate management attention. Based on the results of the site visit to Japan, we narrowed the focus of the audit to specific areas of concern in Japan. These areas included disposals of PCBs outside of the Defense Logistics Agency (DLA) Disposition Services' process; and the management of substances such as per- and polyfluoroalkyl substances (PFAS), which include perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). See Finding C for management comments on the notice of concern and our responses. See Appendix C for the notice of concern.

(U) For the purposes of this report, we considered hazardous waste to include substances such as polychlorinated biphenyl waste and hazardous substances such as perfluorooctanoic acid and perfluorooctane sulfonate.
 (U) This report contains information that has been redacted because it was identified by the Department of Defense Office of Inspector General and the Department of Defense as Controlled Unclassified Information (CUI) that is not releasable outside the Executive Branch. CUI is Government-created or owned unclassified information that allows for, or requires, safeguarding and dissemination controls in accordance with laws, regulations, or Government-wide policies.

(U) Background

(U) DoD Hazardous Waste Roles and Responsibilities in Japan

(U) Through the course of routine operations, the DoD generates hazardous waste, including paints, fuels, oils, and chemicals such as PCBs. The primary DoD office responsible for hazardous property such as hazardous waste is DLA Disposition Services. To conduct hazardous waste disposals, DLA Disposition Services uses private contractors to manage and dispose of hazardous waste generated or held by the Military Services and other DoD entities. The Military Services can also dispose of hazardous waste through other arrangements.

(U) U.S. Forces Japan

(U) U.S. Forces Japan (USFJ) is located at Yokota Air Base, Japan. USFJ focuses on war planning, conducting exercises and studies, administering the Status of Forces Agreement, improving combat readiness, and enhancing the quality of life of military and DoD civilian personnel and their dependents.² The USFJ Commander's peacetime responsibilities include representing the Commander of the U.S. Pacific Command in relations among U.S. forces and other DoD elements, the U.S. Ambassador to Japan, the Japan Ministry of Defense, and other Government of Japan agencies.

(U) USFJ is the Lead Environmental Component responsible for preparing and maintaining environmental standards for U.S. installations in Japan. These standards, known as the JEGS, incorporate DoD and host nation environmental requirements.³ The completion of the JEGS is the result of coordination of USFJ, DoD Service Components, installations, and other pertinent organizations within USFJ's area of responsibility. The JEGS also outline requirements for installations in Japan to manage hazardous waste. The USFJ Commander is required to update the JEGS every 5 years; however, the Commander updates the JEGS every 2 years in accordance with the U.S. Government and Government of Japan's Joint Statement of Environmental Principles agreement.

(U) As the Lead Environmental Component, the USFJ Commander can grant exceptions to the JEGS on a case-by-case basis. All exception requests must be in writing and identify the extent of the relief requested, the period of the exception, the anticipated impact on human health and environment, and the justification for the exception.

² (U) A Status of Forces Agreement establishes the framework under which U.S. military personnel operate in a foreign country and how domestic laws of the foreign jurisdiction apply toward U.S. personnel. A Status of Forces Agreement provides the legal framework for the day-to-day operations of U.S. personnel while serving in a foreign country.

³ (U) USFJ Final Governing Standards, "Japan Environmental Governing Standards," April 2022.

(U) 5th Air Force

(U) The 5th Air Force is a unit of the U.S. Air Force that is headquartered at Yokota Air Force Base in the Tokyo region of Japan. The 15,000 Airmen and Air Force civilians assigned to 5th Air Force and its three main bases partner with Joint Services and counterparts from the Japan Self-Defense Forces to defend Japan, respond to regional contingencies, and enhance the U.S.-Japan Security Alliance. Units that fall under the 5th Air Force include the 18th Wing at Kadena Air Base, the 35th Fighter Wing at Misawa Air Base, and the 374th Airlift Wing at Yokota Air Base.

(U) 374th Airlift Wing

(U) The 374th Airlift Wing is assigned to the 5th Air Force and is located at Yokota Air Force Base. The 374th Airlift Wing is the primary airlift hub and provides transportation of passengers, cargo, and mail in the Pacific area of responsibility. The 374th Airlift Wing consists of four groups: (1) the Operations Group, (2) the Maintenance Group, (3) the Mission Support Group, and (4) the Medical Group. One of the squadrons within the 374th Mission Support Group is the Civil Engineer Squadron. This squadron builds, maintains, and repairs the airfield, facilities, and infrastructure for the 374th Airlift Wing. In addition, the Civil Engineer Squadron provides engineering, fire protection, environmental, housing, disaster response, and training of the appropriate personnel in nuclear, biological, and chemical defense. The 374th Civil Engineer Squadron manages and disposes of hazardous waste such as aqueous film forming foam (AFFF) and PCBs.

(U) Hazardous Substances

(U) Per- and Polyfluoroalkyl Substances

(U) PFAS are a group of manufactured chemicals used in industry and consumer products since the 1940s. PFAS are found in microelectronics, batteries, medical equipment, and AFFF. Two notable types of PFAS are PFOA and PFOS. Industrial manufacturing and disposal of PFAS-containing products releases PFOA and PFOS into the environment. PFOA and PFOS result in potential adverse effects on the environment and human health.

(U) PFAS are a component of AFFF, which is found in fire suppression systems used by the Air Force. AFFF fire suppression systems are designed to put out fuel fires using water mixed with AFFF concentrate to create foam that then smothers the fire. These fire suppression systems have been in use by the Military Services since the 1970s. In the 2010s, the Air Force, in addition to wider DoD efforts, began to take steps to manage and minimize the use of AFFF.

(U) Polychlorinated Biphenyls

(U) PCBs have a wide variety of uses in industrial equipment such as transformers and other electrical equipment. According to the Environmental Protection Agency (EPA), studies in humans support evidence that PCBs may cause cancer and issues with reproduction, compromise immune systems, and have negative neurological effects. Military installations use transformers and lighting fixtures that contain PCBs. According to the 2020 JEGS, in place at the time of the PCB disposals we reviewed during our audit, installations must dispose of PCBs through DLA Disposition Services.

(U) Spill Prevention and Response Plan Requirements for Hazardous Waste

(U) According to the JEGS, all DoD installations must prepare, maintain, and implement a Spill Prevention and Response Plan that provides for the prevention and control of all hazardous substance spills, and for the reporting of all significant spills. The plan must provide measures to prevent and, to the maximum extent practicable, remove a worst-case discharge from the facility. A U.S. licensed professional engineer who is familiar with spill prevention and response requirements must certify the plan. DoD installations must update the Spill Prevention and Response Plan at least every 5 years, within 6 months of any significant changes to operations, when there have been two significant spills to the waters of Japan in any 12-month period, or when there has been a spill of 3,785 liters (1,000 gallons) or greater.

(U) What We Reviewed

(U) We visited three military installations in Japan—Yokota Air Base, U.S. Fleet Activities Yokosuka, and Camp Zama during April 2023. During these site visits, we observed hazardous waste facilities. Our initial observations at Yokota Air Base resulted in a notice of concern issued to the Assistant Secretary of Defense (Energy, Installations, and Environment), USFJ, and the 374th Airlift Wing on July 27, 2023. (See Appendix C for the notice of concern.) As a result of the notice of concern, we reviewed documentation, including the 374th Airlift Wing's corrective action plans, to determine their progress toward implementing the recommendations.

(U) After issuing the notice of concern, we reviewed the 374th Airlift Wing's storage of waste contaminated with PFOA and PFOS and its disposal of PCB-containing transformers. Our analysis focused on whether the Military Services in Japan followed hazardous waste management requirements outlined in the JEGS. We interviewed 374th Civil Engineer Squadron personnel, USFJ legal

(U) and environmental personnel, and Air Force Civil Engineer Center personnel. We also reviewed disposal manifests, hazardous waste permits, and other hazardous waste management documentation. See Appendix A for our scope and methodology.

(U) Finding A

(U) Yokota Air Base Officials Did Not Store Waste Contaminated with PFOA and PFOS in Accordance with DoD Requirements

(U) Air Force personnel at Yokota Air Base in Japan did not store waste contaminated with PFOA and PFOS in accordance with DoD requirements. Specifically, the 374th Airlift Wing's Civil Engineer Squadron stored waste contaminated with PFOA and PFOS in a non-controlled area instead of reducing unauthorized personnel access as required by USFJ guidance. This occurred because the dedicated site for storing hazardous waste was full, and the 374th Airlift Wing in Japan did not have procedures in place for how to properly store waste contaminated with PFOA and PFOS outside of the established hazardous waste storage area. Although we did not identify any leaks from the storage containers, the lack of sufficient storage of waste contaminated with PFOA and PFOS by 374th Airlift Wing personnel could lead to negative effects to the life, health, and safety of the onsite personnel and the surrounding environment. According to the EPA, scientific studies have shown that exposure to PFOA and PFOS may lead to health impacts that include negative reproductive effects, risk of cancer, and interference with the body's immune system. In addition, Japanese citizens have previously expressed concerns regarding PFAS water contamination around Yokota Air Base.

(U) The 374th Airlift Wing Personnel Stored Waste Contaminated with PFOA and PFOS in a Non-Controlled Area

(U) We determined that Air Force personnel at Yokota Air Base in Japan did not store waste contaminated with PFOA and PFOS in accordance with DoD requirements. Specifically, the 374th Airlift Wing's Civil Engineer Squadron stored waste contaminated with PFOA and PFOS in a non-controlled area. The USFJ guidance required military installations in Japan to reduce unauthorized personnel access to PFOA and PFOS-contaminated materials and prevent accidental releases while awaiting disposal.⁴ In addition, the JEGS states that installations in Japan must prevent the unauthorized entry of persons into hazardous material storage areas.

⁴ (U) USFJ Memorandum, "Supplementary Guidance for The Disposal of Waste Containing Perfluorooctane Sulfonate (PFOS) or Perfluorooctanoic Acid (PFOA)," May 29, 2020.

(U) On January 25, 2023, and January 26, 2023, due to cold-weather conditions Yokota Air Base experienced spills of approximately 250 gallons of water contaminated with PFOA and PFOS from a fire suppression system. In February 2023, the 374th Airlift Wing stored the waste from those spills behind the base exchange, until the DLA could dispose of the waste. However, before the DLA could dispose of the waste, the 374th Airlift Wing needed to test the waste to determine the PFOA and PFOS levels. The 374th Airlift Wing started the disposal process for the waste contaminated with PFOA and PFOS by collecting samples between February and March 2023.

(U) On April 12, 2023, we observed the hazardous waste generated from those spills stored near a loading dock behind the base exchange. We did not identify any leaks from the storage containers. Although 374th Airlift Wing personnel put a sign (in English and Japanese) warning people to "Keep Out," the area where the hazardous waste was stored was not secure and was easily accessible to the general base population. Figure 1 shows waste contaminated with PFOA and PFOS stored in a non-controlled location behind the base exchange at Yokota Air Base. Figure 2 shows the "Keep Out" (in English and Japanese) warning sign that 374th Airlift Wing personnel posted in front of the unsecured waste contaminated with PFOA and PFOS.



(U) Source: The DoD OIG.

(U) After our visit to Yokota Air Base, Civil Engineer Squadron officials of the 374th Airlift Wing moved the waste contaminated with PFOA and PFOS to the secure hazardous waste storage area and on July 7, 2023, the DLA Disposition Services' contractor picked up the waste contaminated with PFOA and PFOS for disposal. We reviewed the disposal documentation to verify that 374th Airlift Wing personnel disposed of all waste contaminated with PFOA and PFOS in accordance with DoD requirements. Although the 374th Airlift Wing personnel had a plan in place to properly dispose of the waste contaminated with PFOA and PFOS, they did not store the hazardous waste in accordance with USFJ guidance.



(U) Figure 2. Warning Label Placed at the Site of the Waste Contaminated with PFOA and PFOS(U) Source: The DoD OIG.

(U) The 374th Airlift Wing Civil Engineer Squadron Did Not Have Procedures in Place to Store Waste Contaminated with PFOA and PFOS When Existing Hazardous Waste Storage Facilities Were Full

(U) The 374th Airlift Wing Civil Engineer Squadron did not properly store waste contaminated with PFOA and PFOS because the dedicated site for storing hazardous waste was full, and the 374th Airlift Wing did not have procedures in place for how to properly store waste contaminated with PFOA and PFOS outside of the established hazardous waste storage area. The Installation Management Flight Superintendent from the 374th Airlift Wing's Civil Engineer Squadron stated that the hazardous waste storage area was full of other hazardous waste so there was no room to store the waste contaminated with PFOA and PFOS generated during the January 2023 spills. (U) We reviewed the following documents to determine whether there were procedures in place for the 374th Airlift Wing personnel to follow when the hazardous waste storage area was full.

- (U) Yokota Hazardous Waste Management Plan contains procedures for management of hazardous waste at Yokota Air Base.
- (U) Yokota Spill Prevention and Response Plan provides for the prevention and control of all hazardous substance spills, and for the reporting of all significant spills.

(U) None of the documents state how to properly store hazardous waste when the hazardous waste storage area is full. Therefore, we recommend that the Commander of the 5th Air Force direct the Commander of the 374th Airlift Wing to develop and implement a plan for storing hazardous waste in accordance with USFJ guidance if the existing hazardous waste storage facility is full. In addition, we recommend that the Commander of the 5th Air Force direct the Commanders of the 35th Fighter Wing and the 18th Wing to determine whether the Commands have procedures in place for personnel to follow when the existing hazardous waste storage areas are full. If procedures do not exist, direct the Commanders to develop and implement procedures for storing hazardous waste in accordance with USFJ guidance.

(U) Lack of Hazardous Waste Storage Planning Could Have Negative Effects on Air Force Installations in Japan

(U) The lack of sufficient storage for waste contaminated with PFOA and PFOS by Air Force personnel at Yokota Air Base could lead to negative effects to life, health, and safety of onsite personnel, and the surrounding environment. According to the EPA, scientific studies have shown that exposure to PFOA and PFOS may lead to health impacts that include negative reproductive effects, risk of cancer, and interference with the body's immune system. In addition, Japanese citizens have previously expressed concerns regarding PFAS water contamination around Yokota Air Base. If hazardous material is left in a non-controlled location, personnel, the public, and the environment could be exposed to the negative health impacts.

(U) Recommendations, Management Comments, and Our Response

(U) Recommendation A.1

(U) We recommend that the Commander of the 5th Air Force:

a. (U) Direct the Commander of the 374th Airlift Wing to develop and implement a plan for storing hazardous waste in accordance with U.S. Forces Japan guidance when the existing hazardous waste storage facility is full.

(U) Pacific Air Forces Comments

(U) The Deputy Commander of the Pacific Air Forces, responding for the Commander of the 5th Air Force, agreed with the recommendation, stating that the 5th Air Force will direct the Commander of the 374th Airlift Wing to develop and implement a plan for storing hazardous waste in accordance with USFJ guidance when the existing hazardous waste storage facility is full. The Deputy Commander estimated the completion date to be April 30, 2025.

(U) Our Response

(U) The Deputy Commander addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation when we receive evidence that the Commander of the 374th Airlift Wing developed and implemented a plan for storing hazardous waste in accordance with USFJ guidance when the existing hazardous waste storage facility is full.

b. (U) Direct the Commanders of the 35th Fighter Wing and the 18th Wing to determine whether the Commands have procedures in place for personnel to follow when the existing hazardous waste storage areas are full. If procedures do not exist, direct the Commanders to develop and implement procedures for storing hazardous waste in accordance with U.S. Forces Japan guidance.

(U) Pacific Air Forces Comments

(U) The Deputy Commander of the Pacific Air Forces, responding for the Commander of the 5th Air Force, agreed with the recommendation, stating that the Commander of the 5th Air Force will direct the Commanders of the 35th Fighter Wing and the 18th Wing to determine whether the Commands have procedures in place for personnel to follow when the existing hazardous waste storage areas are full. If procedures do not exist, the Commanders will develop and implement procedures for storing hazardous waste in accordance with USFJ guidance. (U) The Deputy Commander stated that the 5th Air Force and USFJ will conduct a staff assistance visit to review the implementation of the updated plans. The Deputy Commander estimated the completion date to be April 30, 2025.

(U) Our Response

(U) The Deputy Commander addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation when we receive evidence that the Commanders of the 35th Fighter Wing and the 18th Wing have procedures in place, in accordance with USFJ guidance, for personnel to follow when the existing hazardous waste storage areas are full.

(U) Finding B

(U) The 374th Airlift Wing Transferred Ownership of Transformers Containing PCBs Against Policy

(U) The 374th Airlift Wing at Yokota Air Base did not process a hazardous waste disposal in accordance with DoD and JEGS requirements. Specifically, 374th Airlift Wing personnel, through the energy savings performance contract (ESPC) contracting officer, transferred ownership of transformers containing PCBs to a contractor for disposal without receiving an exception to the JEGS requirement to use DLA Disposition Services. The 374th Airlift Wing personnel, through the ESPC contracting officer, transferred ownership of transformers containing PCBs to a contractor because the 374th Airlift Wing personnel believed that an exception to the JEGS requirement was not needed. Without an approved exception, PCBs could be transferred to a contractor without proper oversight, as contractors may not follow transport and disposal requirements, which could potentially lead to the improper disposal of hazardous waste. The improper disposal of hazardous waste could affect U.S. relations with Japan and cause harm to human health and the environment.

(U) The 374th Airlift Wing Did Not Obtain an Exception to Dispose of PCBs Through a Contractor

(U) The 374th Airlift Wing personnel in Japan did not process a hazardous waste disposal in accordance with DoD and JEGS requirements. Specifically, the 374th Airlift Wing personnel, through the ESPC contracting officer, transferred ownership of PCB-containing transformers to a contractor for disposal without receiving an exception to the JEGS requirement to use DLA Disposition Services.

(U) In November 2019, DLA Energy awarded an ESPC to build a combined heat and power plant, among multiple installation improvements at Yokota Air Base. The purpose of an ESPC is to pay for facility upgrades with future energy savings without requesting additional funding. An electrical substation, containing three transformers, was already in place at the site of the future combined heat and power plant. The demolition of the existing substation was required to build the new combined heat and power plant. The ESPC contractor tested the transformers and identified that two of the transformers contained low levels of PCBs. ⁵ As part of the demolition of the substation, the 374th Airlift Wing

⁵ (U) A third transformer was tested and was found to contain PCB levels below the PCB contamination threshold; therefore, it did not require special disposal.

(U) personnel, through the ESPC contracting officer, transferred ownership of the two transformers to the ESPC contractor for disposal without receiving an exception to the JEGS requirement to use DLA Disposition Services. To receive an exception to the JEGS requirement, the 374th Airlift Wing must obtain written approval from the USFJ Commander.

(U) The ESPC contractor arranged for the disposal of the two transformers. Each transformer weighed 36 tons and required dismantling before disposal. The dismantling process generated 103 barrels of PCB transformer oil, 23 pieces of PCB transformer equipment, and 6 barrels of oil residue. The barrels of oil, pieces of transformer equipment, and oil residue from the two transformers required nine individual shipments on flatbed trucks to deliver the waste to the disposal facility.



(U) Figure 3. Transformer and Related Material Loaded onto a Truck (U) Source: The 374th Airlift Wing.



(U) The ESPC contractor used Japanese contractors for the transportation and disposal of the PCBs. We verified that the Government of Japan permitted the transportation and disposal contractors to handle PCB waste. In addition, we verified that the disposal contractor was on DLA Disposition Services' qualified disposal facilities list. The ESPC contractor supplied the U.S. Government with the manifests as proof of the transportation and disposal of the PCBs. The Japanese manifest is a chain of custody package that includes:

- (U) the originator and transporter copies, confirming delivery of waste;
- (U) the disposal company's copy confirming receipt of waste; and
- (U) the disposal company's copy confirming disposal of waste.

(U) We reviewed all manifests for the PCB disposals and determined that the PCBs were transported and disposed of by qualified contractors. However, the 374th Airlift Wing's transfer of ownership of the transformers, through the ESPC contracting officer, for contractor disposal without an exception did not comply with the 2020 JEGS.

(CUI)

(U) The 374th Airlift Wing personnel, through the ESPC contracting officer, transferred ownership of transformers containing PCBs to a contractor because the 374th Airlift Wing personnel believed that an exception to the JEGS requirement was not needed. The 2020 JEGS stated that installations must dispose of PCBs through DLA Disposition Services.⁶ In addition, written approval from the USFJ Commander is needed for any exceptions to the requirements listed in the JEGS. All exception requests must be in writing and identify the extent of the relief requested, the period of the exception, the anticipated impact on human health and environment, and the justification for the exception.

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(CUI) The 374th Airlift Wing personnel considered using DLA Disposition Services as required by the JEGS, but due to funding and time constraints, personnel were not able to dispose of the PCBs through DLA Disposition Services and sought an alternate method. The alternate method involved the ESPC contractor handling the disposal of the PCB waste and used the ESPC future energy savings to fund the cost of disposal. Initially, as part of the alternate method, 374th Airlift Wing personnel pursued an exception to the JEGS requirement to use DLA Disposition Services to dispose of PCB waste and were working through the approval process with relevant stakeholders.



(CUI) the contracting officer modified the contract. The modification directed the contractor to provide all labor, material, equipment, transportation, and incidentals for the disposal

 $^{^{\}rm 6}$ $\,$ (U) At the time of the PCB waste disposal, the 2020 version of the JEGS was in effect.

(CUI) of the PCBs related to the two transformers. The ESPC contractor agreed to accept ownership of the transformers and released the U.S. Government from any liability related to the disposal of the PCBs. After the issuance of the contract modification, 374th Airlift Wing personnel transferred ownership of the PCBs to the ESPC contractor that disposed of the waste through a permitted disposal company.

(CUI) Even though we determined that the PCB waste was properly disposed of, the transfer of ownership of the PCB waste without an exception was incorrect.



included an update as part of the April 2022 revision of the JEGS to prohibit the transfer of ownership of PCB waste to a contractor unless approved by the USFJ Commander. The updated 2022 JEGS clarified the USFJ Commander approval requirement, and the 2024 JEGS continues to prohibit the transfer of ownership of PCB waste to a contractor unless approved by the USFJ Commander. Therefore, we have no recommendations for USFJ.

(U) Wrongful PCB Transfers Could Affect Relations with Japan, Human Health, and the Environment

(U) Without an approved exception, PCBs could be transferred without proper oversight, as contractors may not implement the required transport and disposal controls, which could potentially lead to the improper disposal of hazardous waste. The improper disposal of hazardous waste could affect U.S. relations with Japan and cause harm to human health and the environment. According to the EPA, studies in humans support evidence that PCBs may cause cancer, cause issues with reproduction, compromise immune systems, and have negative neurological effects. PCBs do not readily break down in the environment and can remain for long periods of time cycling through the air, water, and soil. According to the EPA, PCBs also have the capacity to spread long distances, far away from areas where they initially entered the environment.

(U) Management Comments on the Finding and Our Response

(U) Although not required, the Command Engineer for USFJ commented on the finding. For the full text of the Command Engineer's comments, see the Management Comments section of the report.

CUI

(U) U.S. Forces Japan Comments

(CUI) The Command Engineer for USFJ partially concurred with our finding.



(U) Our Response

(CU) Our Response (CU) Despite the Command Engineer's assertion, According to the 2020 JEGS, in place at the time of the PCB disposals, installations must dispose of PCBs through DLA Disposition Services. Although the 2020 JEGS did not explicitly prohibit the transfer of ownership of the PCBs,

(CUI)	

(U) Since the update to the 2022 version of the JEGS explicitly prohibited the transfer of ownership to a contractor without the approval of the USFJ Commander, we believe that USFJ has taken proper steps to prevent the transfer of ownership without proper approval and comply with the JEGS in the future.

(U) Finding C

(U) Notice of Concern Summary and Update: Health, Life, and Safety Concerns Identified at Yokota Air Base and U.S. Fleet Activities Yokosuka Japan

CUI

(U) On July 27, 2023, we issued a notice of concern to the Assistant Secretary of Defense (Energy, Installations, and Environment) and 374th Airlift Wing officials, informing them of the risks to health, life, and safety that we identified during our site visits to Yokota Air Base and U.S. Fleet Activities Yokosuka, Japan, in April 2023 (See Appendix C). We determined that these issues could jeopardize the health, life, and safety of personnel and required immediate management attention. Specifically, 374th Airlift Wing officials at Yokota Air Base:

- (U) did not have the operation and maintenance documentation necessary to identify or hire the specialized staffing required to operate the combined heat and power plant;
- (U) did not have a Spill Prevention and Response Plan in place for the AFFF waste stream; and
- (U) shut off fire suppression systems, including water features, for nine buildings containing AFFF.

(CUI) In addition,

After we issued the notice of concern, we received comments from officials at Yokota Air Base and the Assistant Secretary of Defense (Energy, Installations, and Environment) with actions taken to address our recommendations. Of the four recommendations made, we closed three. The remaining recommendation is resolved and open. We are seeking further actions, which are required to close the recommendation.

(U) The 374th Airlift Wing Did Not Have Operation and Maintenance Documents Required for Safe Operation of the Combined Heat and Power Plant

(U) On July 27, 2023, we issued a notice of concern informing 374th Airlift Wing officials that they did not have the operation and maintenance documentation necessary to identify or hire the specialized staffing required to operate the combined heat and power plant scheduled to open on October 31, 2023. The ESPC

(U) stated that the contractor was responsible for installing the combined heat and power plant equipment, and 374th Airlift Wing personnel were responsible for operating the combined heat and power plant.

(U) The ESPC did not specify when the contractor should provide the operation and maintenance documents to the U.S. Government. The Commander of the 374th Civil Engineer Squadron stated that they requested the operation, maintenance, and repair manuals; requirements; and checklists to operate and maintain the combined heat and power plant from the contractor in early 2022. However, as of April 5, 2023, the Commander stated that the contractor had not provided the documentation to the 374th Airlift Wing.

(U) Without the operation and maintenance documents, the 374th Airlift Wing was not able to develop a staffing plan or hire appropriate personnel for the safe operation and maintenance of the plant, which could lead to health, life, and safety issues for employees operating the plant or the potential for power outages that could affect mission-critical facilities. In addition, not receiving the operation and maintenance documents in sufficient time to create a hiring plan before the scheduled opening of the plant will lead to a delay in hiring heat and power plant staff and to potential increases in operating costs to the 374th Airlift Wing. Therefore, in the notice of concern, we recommended that the Commander of the 374th Airlift Wing coordinate with the contracting officer to modify the ESPC to require the contractor to provide the operation, maintenance, and repair manuals; requirements; and checklists in sufficient time to operate, maintain, and staff the combined heat and power plant before the scheduled opening. The Commander took actions that addressed this recommendation; therefore, the recommendation is closed. Please see the Recommendations, Management Actions Taken, and Our Response section of this finding for additional information.

(U) The 374th Airlift Wing Did Not Have a Spill Prevention and Response Plan for the AFFF Waste Stream

(U) On July 27, 2023, we issued a notice of concern informing 374th Airlift Wing officials that they did not have a Spill Prevention and Response Plan in place for the AFFF waste stream. Specifically, the 374th Airlift Wing did not establish a Spill Prevention and Response Plan identifying cleanup guidance, decontamination recommendations, or detailed information on the safety and response protocols for AFFF. According to the JEGS, the Spill Prevention and Response Plan should include provisions specifying the responsibilities, duties, procedures, and resources to contain and clean up spills.⁷

⁷ (U) USFJ Final Governing Standards, "Japan Environmental Governing Standards," April 15, 2022.

(U) On January 25, 2023, and January 26, 2023, Yokota Air Base experienced spills of approximately 250 gallons of AFFF-contaminated water from a fire suppression system due to cold-weather conditions. The Air Force Civil Engineer Center considers an uncontained release of AFFF to be a hazardous material spill. The 374th Airlift Wing did not have a written Spill Prevention and Response Plan for the AFFF waste stream. Officials from the 374th Airlift Wing stated that they believed they could use a Naval Facilities Engineering Systems Command spill response contract but learned during this event that the contract did not cover Yokota Air Base.

(U) Officials from the 374th Airlift Wing stated that they contained the spills by applying pads and other spill response materials that absorbed the AFFF-contaminated water. Although the 374th Airlift Wing took steps to contain the spill of AFFF-contaminated water, without a written Spill Prevention and Response Plan for the AFFF waste stream, the 374th Airlift Wing cannot ensure a proper spill response and cleanup if another spill occurs. Therefore, in the notice of concern, we recommended that the Commander of the 374th Airlift Wing develop and implement a Spill Prevention and Response Plan for the AFFF waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment.⁸ The Commander should ensure that staff members are properly trained and needed materials are on hand to execute the plan. The Commander took actions that addressed this recommendation by providing a Spill Prevention and Response Plan that covers the AFFF waste stream; therefore, the recommendation is closed. Please see the Recommendations, Management Actions Taken, and Our Response section of this finding for additional information.

(U) The 374th Airlift Wing Disabled Fire Suppression, Including Water Features

(U) On July 27, 2023, we issued a notice of concern informing 374th Airlift Wing officials that they shut off fire suppression systems containing AFFF, including water features, to nine buildings at Yokota Air Base. On November 16, 2021, the Assistant Secretary of the Air Force (Energy, Installations, and Environment) issued "Sundown Policy for Foam Fire Suppression Systems" directing installations aggressively phase out the AFFF fire suppression systems. The policy stated that bases must provide other fire safety measures approved by the Installation Commander or Base Fire Marshal until the conversion.

CUI

⁸ (U) The 374th Civil Engineer Squadron official stated that they were updating the spill response plan that included AFFF waste stream. We requested the updated spill response plan.

(U) In response to the November 2021 policy, officials from the 374th Airlift Wing shut off AFFF fire suppression systems to nine buildings on Yokota Air Base in December 2022. Change 2 of the policy, dated December 29, 2022, requires installations to phase out all AFFF fire suppression systems by March 1, 2023, but ensure that all water features of the fire suppression systems remained in full service. Civil Engineer Squadron officials from the 374th Airlift Wing explained that they could not retain the water feature capabilities for the fire suppression systems because the water tanks that fed the fire suppression systems were already contaminated with AFFF.⁹

(U) If the 374th Airlift Wing left on the water features for the fire suppression systems in these nine buildings, an activation of the systems could release AFFF-contaminated water, causing a hazardous material spill. Therefore, the Commander of the 374th Civil Engineer Squadron decided to shut off all fire suppression systems and water features at the nine buildings on Yokota Air Base with water contaminated by AFFF.

(U) Civil Engineer Squadron officials from the 374th Airlift Wing concluded that the risk to mission; long-term life, health, and safety of the community; and credibility of the U.S. Government of leaving the fire suppression systems on in all buildings with contaminated water was greater than shutting off the fire suppression systems. Officials from the 374th Airlift Wing explained that they planned to rely on base firefighting operations to respond to fires at buildings where they shut off AFFF fire suppression and water features.

(U) Officials from the 374th Airlift Wing explained that the Air Force Civil Engineer Center was in the process of awarding a contract for the disposal and removal of the AFFF from the fire suppression systems. Air Force Civil Engineer Center officials explained that they were planning to award a contract by September 30, 2023. When the 374th Airlift Wing shut off fire suppression systems, the action caused a fire safety deficiency according to Air Force Instruction 32-2001.¹⁰ The Instruction requires installations to manage fire safety deficiencies through a risk management plan and a corrective action plan.

(U) Unified Facilities Criteria 3-601-02 states that appropriate mitigating measures could range from occupant notification to increased fire safety checks or inspections to a full-time fire watch.¹¹ The lack of fire suppression systems

⁹ (U) Officials from the 374th Airlift Wing stated that the fire suppression systems lacked backflow prevention valves, which allowed AFFF to contaminate the water tanks. Backflow prevention valves are designed to stop unwanted flow of water in the reverse direction.

¹⁰ (U) Department of the Air Force Instruction 32-2001, "Civil Engineering Fire and Emergency Services (F&ES) Program," July 28, 2022.

¹¹ (U) Unified Facilities Criteria 3-601-02, "Fire Protection Systems Inspection, Testing, and Maintenance," October 7, 2021.

(U) for these buildings, including water features, could lead to health, life, and safety issues for individuals working at or visiting those buildings. Therefore, in the notice of concern, we recommended that the Commander of the 374th Airlift Wing ensure that the installation develops a written risk management plan and institutes risk mitigation actions such as occupant notification, fire safety education, increased fire safety checks or inspections, or additional base firefighting equipment or supplies while the facilities are without fire suppression systems, including water features. The Commander took actions that addressed this recommendation; therefore, the recommendation is closed. Please see the Recommendations, Management Actions Taken, and Our Response section of this finding for additional information.

(CUI)

(CUI) On July 27, 2023, we issued a notice of concern identifying that the

The Status of Forces Agreement states, "the Armed Forces of the United States shall have the use of all public utilities and services belonging to, or controlled or regulated by, the Government of Japan."¹²





⁽U) Status of Forces Agreements are agreements that establish the framework under which U.S. Military personnel operate in a foreign country and how domestic laws of the foreign jurisdiction apply toward U.S. personnel in that country.

¹³ (CUI)

(CUI)
(CUI)
In the notice of concern, we recommended
therefore the recommendation

is resolved but open. Please see the Recommendations, Management Actions Taken, and Our Response section of this Finding for additional information.

(U) Recommendations, Management Actions Taken, and Our Response

(U) Recommendation C.1

(U) We recommend that the Commander of the 374th Airlift Wing coordinate with the contracting officer to modify the energy savings performance contract to require the contractor to provide the Operation, Maintenance, and Repair Manuals, Requirements, and Checklists in sufficient time to operate, maintain, and staff the combined heat and power plant before the scheduled opening.

(U) Management Actions Taken

(U) The 374th Airlift Wing Commander responded to the notice of concern, stating that on June 9, 2023, the contractor building the combined heat and power plant provided the operation and maintenance documents to the 374th Airlift Wing, and these documents will be used to train installation personnel. The Environmental Chief for the 374th Airlift Wing stated that, as of September 2024, the plant had a hybrid operation service contract in which both contractor and government personnel are responsible for operating and maintaining the plant.

(U) Our Response

(U) We reviewed the operations and maintenance document provided by the Commander of the 374th Airlift Wing. The operations and maintenance document stated the number of personnel required per shift to perform and maintain the required logs, manufacturer's recommended tasks, and responsibilities necessary to support the function of the central heating and power plant. The operations and maintenance document explained the responsibilities for the different personnel on a daily, weekly, monthly, and yearly basis. Therefore, the 374th Airlift Wing has all the required documents to operate, maintain, and staff the combined heat and power plant. As a result, this recommendation is closed.

(U) Recommendation C.2

(U) We recommend that the Commander of the 374th Airlift Wing develop and implement a Spill Prevention and Response Plan for the aqueous film forming foam waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment. The Commander should ensure that staff members are properly trained and needed materials are on hand to execute the plan.

(U) Management Actions Taken

(U) The 374th Airlift Wing Commander responded to the notice of concern, stating that the 374th Airlift Wing uses an interim Yokota Air Base Spill Prevention and Response Plan, which incorporates specific response actions for AFFF spills. The Commander stated that the 374th Airlift Wing maintains spill response supplies to contain AFFF according to the draft 2023 Spill Prevention and Response Plan. They stated that the Yokota Spill Response Cross-Functional Team is responsible for responding to AFFF spills and conducts training to maintain spill response proficiency. They also stated that the Cross-Functional Team conducted seven training events and exercises since August 2022 and will continue to train its personnel for AFFF spill response.

(U) In addition, the Deputy Commander of Pacific Air Forces, responding to the draft report for the Commander of the 374th Airlift Wing, agreed with the recommendation, stating that the Commander will develop and implement a Spill Prevention and Response Plan for the AFFF waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment. The Deputy Commander also stated that the Commander will ensure that staff members are properly trained and needed materials are on hand to execute the plan. The Deputy Commander acknowledged that the 374th Airlift Wing completed updates to the installation Spill Prevention and Response Plan in response to the notice of concern and this recommendation. The 374th Airlift Wing provided the latest version of the Spill Prevention and Response Plan, dated February 2025. The Deputy Commander stated that the February 2025 Spill Prevention and Response Plan includes a spill prevention and response plan for the AFFF waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment.

(U) Our Response

(U) We examined the February 2025 Yokota Spill Prevention and Response Plan the 374th Airlift Wing provided and found that it contained several areas focused specifically on the AFFF waste stream, including potential AFFF spill areas and unique requirements for AFFF. Additionally, the plan has an extensive section on staff training. Therefore, this recommendation is closed.

(U) Recommendation C.3

(U) We recommend that the Commander of the 374th Airlift Wing ensure that the installation develops a written risk management plan and institutes risk mitigation actions such as occupant notification, fire safety education, increased fire safety checks or inspections, or additional base firefighting equipment or supplies while the facilities are without fire suppression systems, including water features.

(U) Management Actions Taken

(U) The 374th Airlift Wing Commander responded to the notice of concern, stating that they would develop a risk management plan in FY 2024, and interim mitigation actions are still needed and would be developed according to the recommendations. Actions taken by the 374th Airlift Wing included turning on all the water features in affected buildings, and additional fire safety mitigation measures, including conducting additional comprehensive training from the Fire Prevention Office to facility managers and further clarifying fire safety policy. Although 374th Airlift

(U) Wing personnel turned the water back on, they identified additional actions to reduce the risk of the contaminated water being released into the environment. The mitigation actions include:

- (U) closing the outflow gate to prevent release off base;
- (U) maintaining spill kits in affected buildings; and
- (U) ensuring backflow valves for the water tanks continue to function properly.

(U) In addition, on September 28, 2023, the U.S. Army Corps of Engineers awarded the contract for the removal of the AFFF in the fire suppression systems.

(U) Our Response

(U) Due to the water features being turned back on in all affected buildings, a fire safety deficiency no longer exists. Because Air Force Instruction 32-2001 requires only a risk management plan when a fire safety deficiency exists, the need for a risk management plan is no longer required. Additionally, the fire safety mitigation actions taken, in addition to the fire suppression systems water features being turned back on, meet the intent of our recommendation. Therefore, this recommendation is closed.

(U) Recommendation C.4

(CUI) We recommend that the Assistant Secretary of Defense (Energy, Installations, and Environment)

(U) Management Actions Taken



(CUI)

(U) Our Response

(CUI) The Assistant Secretary agreed with the recommended action. Additionally, as of September 2024, the Assistant Secretary of the Army issued policy guidance for the Army

Therefore, this recommendation is resolved but will remain open. We will close the recommendation once we obtain evidence that the plan is developed and approved.

(U) Appendix A

(U) Scope and Methodology

(U) We conducted this performance audit from April 2023 through October 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

CUI

(U) This report was reviewed by the DoD Components associated with this oversight project to identify whether any of their reported information, including legacy FOUO information, should be safeguarded and marked in accordance with the DoD CUI Program. In preparing and marking this report, we considered any comments submitted by the DoD Components about the CUI treatment of their information. If the DoD Components failed to provide any or sufficient comments about the CUI treatment of their information, we marked the report based on our assessment of the available information.

(U) Scope

(U) We originally announced this audit on September 12, 2022. On July 27, 2023, we issued a notice of concern memorandum identifying multiple issues in Japan that could jeopardize health, life, and safety or were otherwise time sensitive and required immediate management attention. Based on the results of a site visit to Japan in April 2023, we narrowed the focus of the audit to specific areas of concern in Japan and reannounced this audit on December 18, 2023. These revised focus areas included the management of emerging substances such as PFAS, which include PFOA and PFOS, and disposals of PCBs. See Finding C for a summary of our notice of concern, a description of the management actions taken, and our response. See Appendix C for the notice of concern and management comments.

(U) Site Visits and Interviews

(U) We conducted site visits to Yokota Air Base, Camp Zama, and U.S. Fleet Activities Yokosuka in Japan. We met and interviewed officials with USFJ, the 5th Air Force, Air Force Installation and Mission Support Center, Detachment 2 Environmental Branch, the 374th Airlift Wing, and the Naval Facilities Engineering Systems Command. We interviewed the officials to identify processes and procedures, and we obtained documentation related to the management of PFOA, PFOS, PCBs, and the combined heat and power plant at Yokota Air Base. We also conducted interviews with officials at the following agencies and organizations.

- (U) Environmental Protection Agency
- (U) Office of Under Secretary of Defense for Policy (Indo-Pacific Security Affairs/ East Asia)
- (U) Office of the Deputy Assistant Secretary of Defense (Environment and Energy Resilience)
- (U) Defense Logistics Agency Energy

(U) Criteria Reviewed

(U) We reviewed the following criteria to understand the requirements governing the management and disposal of PFOA, PFOS, and PCBs.

- (U) "Japan Environmental Governing Standards," December 2020
- (U) "Japan Environmental Governing Standards," April 2022
- (U) "Japan Environmental Governing Standards," April 2024
- (U) Commander USFJ, "Supplementary Guidance for the Disposal of Waste Containing Perfluorooctane Sulfonate (PFOS) or Perfluorooctanoic Acid (PFOA)," May 29, 2020

(U) Methodology

(U) Storage of Waste Contaminated with Perfluorooctanoic Acid and Perfluorooctane Sulfonate

(U) To determine whether the waste contaminated with PFOA and PFOS was stored properly, we compared storage requirements listed in the JEGS and the USFJ guidance to observations of the waste storage during a site visit. To determine whether the 374th Airlift Wing properly disposed of the waste, we reviewed disposal documentation provided by the 374th Airlift Wing.

(U) PCB Disposals Through Yokota Air Force Base

(U) To determine whether the ESPC contractor disposed of PCB waste, consisting of 103 barrels of PCB transformer oil, 23 components of PCB transformer equipment, and 6 barrels of oil residue, in accordance with DoD and JEGS requirements, we reviewed manifest documents provided by 374th Airlift Wing personnel. In addition, we reviewed the DLA's Qualified Facilities List documents to determine whether the disposal contractor was a contractor approved by the DLA. We also reviewed PCB permits to determine whether the Government of Japan permitted the disposal contractors to handle PCB waste.

CUI



we interviewed officials from the Office of Under Secretary of Defense for Policy (Indo-Pacific Security Affairs/East Asia), Office of the Deputy Assistant Secretary of Defense (Environment and Energy Resilience), USFJ, 374th Airlift Wing, and Naval Facilities Engineering Systems Command.

(U) Combined Heat and Power Plant Documentation

(U) To determine whether the 374th Airlift Wing obtained operation and maintenance documents for the safe operation of the combined heat and power plant, we interviewed officials from the 374th Civil Engineer Squadron and reviewed contract documentation.

(U) Spill Response Plan

(U) To determine whether the 374th Airlift Wing had a spill response plan for the AFFF waste stream, we interviewed officials from the 374th Airlift Wing and reviewed spill response documents, the current Yokota Air Base Spill Prevention and Response Plan, and guidance and directives from USFJ.

(U) Fire Suppression Systems

(U) To determine whether the 374th Airlift Wing disabled fire suppression, including water features, we interviewed officials from the 374th Civil Engineer Squadron and reviewed safety documentation.

(U) Internal Control Assessment and Compliance

(U) We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. We assessed whether the Military Services provided oversight and processed hazardous waste disposals in accordance with DoD requirements. Specifically, we assessed the 374th Airlift Wing's control activities for hazardous waste access restrictions and accountability for hazardous waste disposal. However, because our review was limited to these internal control components and underlying principles, our review may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

(U) Use of Computer-Processed Data

(U) We did not use computer-processed data to perform this audit.

(U) Prior Coverage

(U) During the last 5 years, the DoD Office of Inspector General (DoD OIG) and the Government Accountability Office (GAO) issued two reports related to our audit objective. Unrestricted DoD OIG reports can be accessed at http://www.dodig.mil/ reports.html/. Unrestricted GAO reports can be accessed at http://www.gao.gov.

(U) DoD OIG

(U) Report No. DODIG-2021-105, "Evaluation of the Department of Defense's Actions to Control Contaminant Effects from Perfluoroalkyl and Polyfluoroalkyl Substances at Department of Defense Installations," July 2021

(U) The DoD OIG determined the extent that the DoD has taken to identify, mitigate, and remediate contamination from PFAS at DoD installations as well as identify populations exposed to PFAS and inform them of the associated health and safety concerns. The DoD OIG found that the DoD is identifying, mitigating, and remediating contaminant effects from PFAS-containing AFFF; however, the DoD's Emerging Chemicals Program needs improvement. In addition, DoD officials did not require proactive risk management actions to mitigate contaminant effects from PFAS-containing AFFF at DoD installations until 2016.

(U) GAO

(U) Report No. 21-421, "Firefighting Foam Chemicals," June 2021

(U) The GAO analyzed DoD data on PFAS and foam alternatives and interviewed officials from the DoD to evaluate the DoD's progress in the investigation and cleanup of PFAS at its installations, and the DoD's actions to address PFAS in

(U) drinking water. The GAO found that the DoD is engaged in early phases of PFAS investigation at its installations and has taken some actions to address PFAS contamination in drinking water. Additionally, the DoD has identified nearly 700 installations with a known or suspected PFAS release.

(U) Appendix B

(U) DoD Hotline Allegations

(U) Background

(CUI)

(U) Allegation (CUI)

(U) Results

(CUI)			

(U) Appendix C

(U) Notice of Concern and Management Response

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(U) The 374th Airlift Wing Needs to Obtain Operation and Maintenance Documents for the Safe Operation of the Combined Heat and Power Plant

(U) The 374th Airlift Wing did not have the documentation necessary to identify or hire the specialized staffing required to operate the combined heat and power plant scheduled to open on October 31, 2023. The energy savings performance contract (ESPC) stated that the contractor was responsible for installing the combined heat and power plant equipment and 374th Airlift Wing personnel were responsible for operating the combined heat and power plant. The ESPC did not specify the date when the contractor should provide the operation and maintenance documents to the U.S. Government. The 374th Airlift Wing Civil Engineering Squadron Commander stated that he requested the Operation, Maintenance, and Repair Manuals, Requirements, and Checklists to operate and maintain the combined heat and power plant from the contractor in early 2022. However, as of April 5, 2023, the Commander stated that the contractor to the 374th Airlift Wing.

(U) Without the operation and maintenance documents, the 374th Airlift Wing is not able to develop a staffing plan and hire appropriate personnel for the safe operation and maintenance of the plant, which could lead to health, life, and safety issues for employees operating the plant or the potential for power outages that could affect mission-critical facilities. In addition, not receiving the operation and maintenance documents in sufficient time to create a hiring plan before the scheduled opening of the plant, will lead to a delay in hiring heat and power plant staff and to potential increases in operating costs to the 374th Airlift Wing. *The Commander of the 374th Airlift Wing should coordinate with the contracting officer to modify the ESPC to require the contractor to provide the Operation, Maintenance, and Repair Manuals, Requirements, and Checklists in sufficient time to operate, maintain, and staff the combined heat and power plant before the scheduled opening.*

(U) The 374th Airlift Wing Did Not Have a Spill Response Plan for the AFFF Waste Stream

(U) The 374th Airlift Wing did not have a spill response plan in place for the AFFF waste stream. Specifically, the 374th Airlift Wing did not establish a spill response plan identifying clean-up guidance, decontamination recommendations, or detailed information on the safety and response protocols for AFFF. According to the Japan Environmental Governing Standards, the

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(U) spill response plan should include provisions specifying the responsibilities, duties, procedures, and resources to contain and clean up spills.1

(U) On January 25, 2023, and January 26, 2023, Yokota Air Base experienced spills of approximately 200 gallons of AFFF-contaminated water from a fire suppression system due to cold-weather conditions (See Attachment Section A, "AFFF Spill into Drains"). The Air Force Civil Engineer Center considers an uncontained release of AFFF to be a hazardous material spill. The 374th Airlift Wing did not have a written spill response plan for the AFFF waste stream. Officials from the 374th Airlift Wing stated that they believed they could use a Naval Facilities Engineering Systems Command spill response contract but learned during this event that the contract did not cover Yokota Air Base.

(U) Officials from the 374th Airlift Wing stated that they contained the spills by applying pads and other spill response materials that absorbed the AFFF-contaminated water. Although the 374th Airlift Wing took steps to contain the spill of AFFF-contaminated water, without a written spill response plan for the AFFF waste stream, the 374th Airlift Wing cannot ensure a proper spill response and cleanup if another spill occurs. The Commander of the 374th Airlift Wing should develop and implement a spill response plan for the AFFF waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment.² The Commander should ensure that staff members are properly trained and needed materials are on hand to execute the plan.

(U) The 374th Airlift Wing Disabled Fire Suppression, Including Water Features

(U) 374th Airlift Wing officials shut off fire suppression systems containing AFFF, including water features, to nine buildings at Yokota Air Base. On November 16, 2021, the Assistant Secretary of the Air Force (Energy, Installations, and Environment) issued "Sundown Policy for Foam Fire Suppression Systems" directing installations aggressively phase out the AFFF fire suppression systems. The policy stated that bases must provide other fire safety measures approved by the Installation Commander or Base Fire Marshal until the conversion.

(U) In response to the November 2021 policy, officials from the 374th Airlift Wing shut off AFFF fire suppression systems to nine buildings on Yokota Air Base in December 2022. Change 2 of the policy, dated December 29, 2022, required installations to phase out all AFFF fire suppression systems by March 1, 2023, but ensure that all water features of the fire suppression systems remained in full service. Civil Engineering Squadron officials from the 374th Airlift Wing explained that they could not retain the water feature capabilities for the fire suppression systems because the water tanks that fed the fire suppression systems were already contaminated with AFFF.³ If the 374th Airlift Wing left on the water features for the fire suppression systems in these nine buildings, an activation of the systems could release AFFFcontaminated water causing a hazardous material spill. Therefore, the 374th Civil Engineering Squadron Commander decided to shut off all fire suppression systems and water features at the

¹ (U) Japan Environmental Governing Standards, Headquarters U.S. Forces Japan, April 15, 2022.
² (U) The 374th Civil Engineering Squadron official stated that they were updating the spill response plan that included the AFFF waste stream We requested the updated spill response plan. ³ (U) Officials from the 374th Airlift Wing stated that the fire suppression systems lacked backflow prevention valves, which allowed AFFF to

contaminate the water tanks. Backflow prevention valves are designed to stop unwanted flow of water in the reverse direction 3

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(U) nine buildings on Yokota Air Base with water contaminated by AFFF. Civil Engineering Squadron officials from the 374th Airlift Wing concluded that the risk to mission; long-term life, health, and safety of the community; and the credibility of the U.S. Government of leaving the fire suppression systems on in all buildings with contaminated water was greater than shutting the fire suppression systems off. Officials from the 374th Airlift Wing explained that they planned to rely on base firefighting operations to respond to fires at buildings where they shut off AFFF fire suppression and water features.

(U) Officials from the 374th Airlift Wing explained that they could not install new fire suppression systems in the affected buildings until the Air Force Civil Engineer Center created a contract for the disposal and removal of the AFFF fire suppression systems. Air Force Civil Engineer Center officials explained that they were planning to award a contract by September 30, 2023. When the 374th Airlift Wing shut off fire suppression systems, the action caused a fire safety deficiency according to Air Force Instruction 32-2001.⁴ The Instruction requires installations to manage fire safety deficiencies through a risk management plan and a corrective action plan. Unified Facilities Criteria 3-601-02 states that appropriate mitigating measures could range from occupant notification to increased fire safety checks or inspections to a full-time fire watch.5 The lack of fire suppression systems for these buildings, including water features, could lead to health, life, and safety issues for individuals working at or visiting those buildings. Therefore, the Commander of the 374th Airlift Wing should ensure that the installation develops a written risk management plan and institutes risk mitigation actions such as occupant notification, fire safety education, increased fire safety checks or inspections, or additional base firefighting equipment or supplies while the facilities are without fire suppression systems, including water features.

CUI

• (U) Ensure that the installation develops a written risk management plan and institutes risk mitigation actions such as occupant notification, fire safety education, increased fire safety checks or inspections, or additional base firefighting equipment or supplies while the facilities are without fire suppression systems, including water features.

(CUI)

(U) Please provide us with the actions you have taken to address the concerns we identified at Yokota Air Base and U.S. Fleet Activities Yokosuka by August 10, 2023. Your response should describe the interim controls or corrective actions taken to address the concerns and any ongoing or planned actions. This memorandum and your response will be included in our final report.

(CUI) If you have any questions, please contact

FOR THE INSPECTOR GENERAL:

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Richard B. Vasquez Assistant Inspector General for Audit Readiness and Global Operations

Attachment: As stated

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	CUI DEPARTMENT OF THE AIR FORCE 374TH AIRLIFT WING	California Puchante
		16 August 2023
MEMORAND	UM FOR DEPARMENT OF DEFENSE INSPECTOR GEN	ERAL
FROM: COM	MANDER, 374TH AIRLIFT WING	
SUBJECT: (U Hazardous Wa) Concerns Identified During the Audit of Department of Def ste Disposals (Project No. D2022-D000RK-0174.000)	ense Management of
 (U) This is Identified Duri Disposals" (Pr concurs with the second second	the 374th Airlift Wing (374 AW) response to the DoDIG Fina ng the Audit of Department of Defense Management of Haza oject No. D2022-D000RK-0174.000) dated 27 July 2023. The re report as written and welcomes the opportunity to address t	ll Report, "Concerns rdous Waste 2374 AW/CC he stated concerns.
2. (U) The 374 identified in th following resp	4 AW/CC in coordination with Pacific Air Forces (PACAF) w is report, and develop and implement a corrective action plan onses to the audit's recommendations:	rill correct issues outlined in the
(U) RECOMN contracting off contractor to p Checklists in s before the sche	IENDATION 1: The Commander of the 374 AW should con- icer to modify the energy savings performance contract (ESPC rovide the Operation, Maintenance, and Repair Manuals, Requ ufficient time to operate, maintain, and staff the combined hear eduled opening.	ordinate with the C) to require the uirements, and at and power plant
(U) 374 AW F Power Plant pr AW. They will burn-in that wi	ESPONSE: <i>Recommend closed.</i> The contractor building the ovided the operation and maintenance documents on 9 June 2 be utilized to train installation personnel during an upcoming 11 commission the plant.	Combined Heat 023 to the 374 30-day generator
(U) RECOMM implement a sp safety of the re The Command are on hand to	1ENDATION 2: The Commander of the 374 AW should de oill response plan for the AFFF waste stream to protect the life sponding spill response team, onsite personnel, and surroundi er should ensure that staff members are properly trained and r execute the plan.	velop and e, health, and ng environment. needed materials
(U) 374 AW F AW utilizes an incorporates sp 2017 SPRP than next update of documents wh	ESPONSE: Recommend open until final plan is complete. Consistent of the provided Air Base Spill Prevention and Response Plan becific response actions for AFFF spills. This plan supplement it was last updated through a centrally managed AFIMSC Det the Yokota SPRP is currently in draft and will incorporate the ich were compiled in 2021. To support the plan, the 374 AW mathematical sectors are supported and the spin sectors and the spin sectors are spin and the spin sectors are spin and the spin sectors and the spin sectors are spin and the spin and the spin sectors are spin and the spin and the spin sectors are spin and the spin and the spin sectors are spin and the spin sectors are spin and the spin and the spin sectors are spin and the	Currently, the 374 (SPRP), which ts the standing 2 contract. The e AFFF supporting maintains a ready
	CUI Control	led By: 374 AW/CC tegory: PRVCY

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Response (cont'd)

ATTES OF DEPARTMENT	HEADQUARTERS UNITED STATES FORCES, JAPAN APO AREA PACIFIC 96328-5068
	17 Aug 2023
MEMORAN	DUM FOR DEPARTMENT OF DEFENSE OFFICE OF INSPECTOR GENERAL
FROM: USI Uni APO	FJ/J4 COMMAND ENGINEER t 5068 O AP 96328-5068
SUBJECT:	(U) DoD/IG Memorandum, Concerns Identified During the Audit of Department of Defense Management of Hazardous Waste Disposals (Project No. D2022- D0000RK-0174.000), dated 27 July 2023
1. (U) Than to the April 2 like to provid	k you for the opportunity to respond to your 27 July Memorandum of Concerns relate 2023 audit of hazardous waste disposal in Japan. U.S. Forces, Japan (USFJ) would de some updates and clarifications to the information provided in the Memorandum.
2. (CUI)	
3. (CUI) (U	
4. (CUI)	

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(CUI)	
5. (CUI)	
6. (CUI) For any quest	ions or additional information, please contact myself at
	CATHELINEAUD.ABIGA IL.ADAMS. ABIGAIL A. CATHELINEAUD Colonel, United States Army Command Engineer, U.S. Forces, Japan
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	ASSISTANT SECRETARY OF DEFENSE 3400 DEFENSE PENTAGON WASHINGTON, DC 20301-3400	
ENERGY, INSTALLATION AND ENVIRONMENT	s. August 31, 2023	
MEMOR	ANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDIT READINESS AND GLOBAL OPERATIONS	
(U) SUBJECT	: Review of Notice of Concern Identified in the Audit of DoD Management of Hazardous Waste Disposals (Project Number D2022-D000RK-0174.000)	
(CUI) I a for Energ	m providing a response to the recommendation for the Assistant Secretary of Defense , Installations, and Environment (ASD(EI&E))	
(CUI)		
(601)		
(U) Pl Environm	ease contact Acting Deputy Assistant Secretary of Defense for ent and Energy Resilience with any questions or concerns.	
	CRAMER.PAUL.D	
	for: AVID. Brendan M. Owens	
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(U) Management Comments

(U) Pacific Air Forces

	DEPARTMENT OF THE AIR FORCE PACIFIC AIR FORCES
	7 March 2025
MEN	10RANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL
FRO	M: HQ PACAF/CD 25 E Street, Suite G-210 JBPH-H HI 96853-5240
(U) SUB.	JECT: Department of the Air Force Response to DoD Office of Inspector General Draft Report, "Audit of DoD Management of Hazardous Waste Disposals in Japan" (Project No. D2022-D000RK-0174)
(U) 1. T Man The over	This is the Department of the Air Force response to the DoDIG Draft Report, "Audit of DoD agement of Hazardous Waste Disposals in Japan" (Project No. D2022-D000RK-0174). DAF concurs with the report as written and welcomes the opportunity to improve the sight over and processing of hazardous waste disposals per DoD requirements.
(U) 2. P and	ACAF in coordination with 5 AF and 374 AW will correct issues identified in this report, develop and implement a corrective action plan outlined in the following recommendations:
(U) REC Force storir hazar	OMMENDATION A.1.a : The DoDIG recommends that the Commander of the 5th Air e direct the Commander of the 374th Airlift Wing to develop and implement a plan for a plazardous waste in accordance with U.S. Forces Japan guidance when the existing dous waste storage facility is full.
(U) DAF 5th A plan t waste	RESPONSE: PACAF concurs with the recommendation, stating the Commander of the ir Force will direct the Commander of the 374th Airlift Wing to develop and implement a for storing hazardous waste per U.S. Forces Japan guidance when the existing hazardous e storage facility is full. Estimated Completion Date: 30 April 2025.
(U) REC Force the C waste imple guida	OMMENDATION A.1.b : The DoDIG recommends that the Commander of the 5th Air e direct the Commanders of the 35th Fighter Wing and the 18th Wing to determine whether ommands have procedures in place for personnel to follow when the existing hazardous e storage areas are full. If procedures do not exist, direct the Commanders to develop and ement procedures for storing hazardous waste in accordance with U.S. Forces Japan ince.
(U)DAF 5th A detern existi devel	RESPONSE: PACAF concurs with the recommendation, stating the Commander of the ir Force will direct the Commanders of the 35th Fighter Wing and the 18th Wing to mine whether the Commands have procedures in place for personnel to follow when the ng hazardous waste storage areas are full. If procedures do not exist, the Commanders will op and implement procedures for storing hazardous waste per U.S. Forces Japan guidance.

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(U) Pacific Air Forces (cont'd)

- (U) 5 AF and USFJ will conduct a staff assistance visit to review the implementation of the updated plans. Estimated Completion Date: 30 April 2025.
- (U) **RECOMMENDATION C.2**: The DoDIG recommends that the Commander of the 374th Airlift Wing develop and implement a spill prevention and response plan for the aqueous film forming foam waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment. The Commander should ensure that staff members are properly trained and needed materials are on hand to execute the plan.
- (U) DAF RESPONSE: PACAF concurs with the recommendation, stating the Commander of the 374th Airlift Wing will develop and implement a spill prevention and response plan for the aqueous film forming foam waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment. The Commander will ensure that staff members are properly trained and needed materials are on hand to execute the plan. The 374 AW has completed updates to the installation Spill Prevention and Response Plan in response to the notice of concern and this recommendation. The latest version, dated February 2025, includes a spill prevention and response plan for the aqueous film forming foam waste stream to protect the life, health, and safety of the responding spill response team, onsite personnel, and surrounding environment. Fifth Air Force requests that this recommendation be closed once the proper authorities have reviewed and evaluated the updated Spill Prevention and Response Plan. Estimated Completion Date: Request Closure.

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Lawalindina) LAURA L. LENDERMAN Lieutenant General, USAF Deputy Commander

(U)	United	States	Forces	Japan
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MEMORA	NDUM FOR DEPARTMENT OF DEFENSE OFFICE OF INSPECTOR GENERAL
FROM: U U A	SFJ/J4 COMMAND ENGINEER nit 5068 PO AP 96328-5068
SUBJECT	: (U) DoD/IG Draft Report, Audit of DoD Management of Hazardous Waste Disposals in Japan (Project No. D2022-D0000RK-0174.000), dated 5 February 2025
1. (U) You or disagree taken or pl completior below.	ar office requested U.S. Forces, Japan (USFJ) provide comments on whether we agree e with the DoD IG recommendations in the draft report, describe what actions we have an to take to accomplish the recommendations, and provide the actual or planned a dates of our actions. USFJ response to Finding B in the draft report is in Paragraph 2
2. (U) <u>Dol</u>	D IG Report Finding B
a. Findi	ing B of the report identified the following deficiencies:
• (l a;	U) The 374th Airlift Wing transferred ownership of transformers containing PCBs gainst policy;
• (I c	U) The 374th Airlift Wing did not obtain an exception to dispose of PCBs through a ontractor;
• ((CUI) and
• (l ei	U) Wrongful PCB transfers could affect relations with Japan, human health, and the nvironment.
b. (CUI	9
i. (Cl	J) USFJ non-concurs with the findings in part and concurs in part.

(U) United States Forces Japan (cont'd)

(U) Acronyms and Abbreviations

CUI

- AFFF Aqueous Film Forming Foam
- **DLA** Defense Logistics Agency
- **EPA** Environmental Protection Agency
- ESPC Energy Savings Performance Contract
- FOIA Freedom of Information Act
- JEGS Japan Environmental Governing Standards
- PCBs Polychlorinated Biphenyls
- PFAS Per- and Polyfluoroalkyl Substances
- PFOA Perfluorooctanoic Acid
- PFOS Perfluorooctane Sulfonate
- USFJ U.S. Forces Japan

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Whistleblower Protection U.S. Department of Defense

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