



Office of Inspections
Office of Inspector General
U.S. General Services Administration

Public Buildings Service is Not Effectively Administering the Fuel Storage Tank Management Program

JE24-002 (Redacted)

July 30, 2024

Introduction

In May 2023, the Office of Inspector General (OIG), Office of Inspections, initiated an evaluation of the General Services Administration's (GSA) Fuel Storage Tank Management Program. The purpose of this evaluation was to determine if GSA's Public Buildings Service (PBS) is managing the Fuel Storage Tank Management Program effectively.

Fuel storage tanks are any container used to store hazardous materials, and are separated into two categories: aboveground and underground.¹ Aboveground storage tanks are any tank or other container that is above ground, partially buried, bunkered, or in a subterranean vault and used to store oil, including tanks connected directly to generators.² Whereas an underground storage tank is a tank and connected underground piping with at least 10% of their combined volume underground.³

GSA owns or operates an inventory of over 1,000 fuel storage tanks at federal facilities under its jurisdiction, and it is PBS's policy is to comply with all regulatory requirements – federal, state, interstate, and local, as well as the International Fire Code and National Fire Protection Association (NFPA) codes and standards – for fuel storage tanks.⁴ Although GSA predominately uses fuel storage tanks to store heating oil, numerous facilities use the tanks to store diesel for generators.

Our evaluation found that PBS is not effectively administering the Fuel Storage Tank Management Program. During our site visits to five GSA regions, encompassing 25 locations, we found that PBS does not have a complete or accurate inventory of the fuel storage tanks currently in service. Additionally, the regional personnel responsible for day-to-day operations and maintenance did not have the necessary plans to properly account for or maintain the fuel storage tanks, nor to respond to a leak or a spill.⁵ We also found that required monthly visual inspections were either performed inaccurately or not saved in the system of record, and that none of the five regions we visited had consistently applied the NFPA guidance for signage and markings on or around the fuel storage tanks.

Our report makes four recommendations to address the issues identified during the evaluation. In response to our report, GSA management agreed with our recommendations. Management

¹ Hazardous materials are any item that is required to have a Safety Data Sheet or is regulated by the Department of Transportation (e.g., oil, fuel, hazardous waste, etc.). Tanks and cylinders used to store propane are excluded from this definition. GSA Order PBS 1095.2, *Fuel Storage Tank Management*, September 21, 2016, pg. A-1.

² *Id.*

³ 40 C.F.R. § 280.12 – Definitions.

⁴ “Where the laws and/or regulations differ from GSA Policy, the more stringent requirement shall be applied.” *Public Buildings Service Desk Guide For Fuel Storage Tank Management, Companion to GSA Order PBS 1095.2*, September 12, 2016, pg. 1.

⁵ See Appendix B of this report for a list of the locations visited for the evaluation.

comments can be found in their entirety in Appendix C.

Background

Within the PBS Office of Facilities Management (OFM), the Facility Risk Management Division focuses on identifying, addressing, and mitigating risks associated with several program areas, including the management, permitting, installation, replacement, and closure of fuel storage tanks. Owners and operators of fuel storage tanks must install, operate, and maintain the fuel storage tanks in a manner that reduces the potential for release of their contents into the environment.⁶ As the owner and/or operator of fuel storage tanks at federal facilities, GSA assumes the associated risks. The *Public Buildings Service Desk Guide for Fuel Storage Tank Management* (Desk Guide), September 12, 2016, provides additional information to implement the requirements of GSA Order PBS 1095.2, *Fuel Storage Tank Management* (Order), September 21, 2016. (See Image 1 of two fuel storage tanks.)

Image 1. Aboveground Fuel Storage Tanks⁷



In 2014, GSA began adding fuel storage tank data to GSA's National Computerized Maintenance Management System (NCMMS). Effective September 12, 2016, NCMMS was established as the required central repository for fuel storage tank inventory and recordkeeping.⁸ As of May 16, 2023, NCMMS showed 1,039 active fuel storage tanks at GSA owned or leased facilities. The Desk Guide recommends responsibility for the inventory at both the regional and

⁶ Order, at page 1.

⁷ Photograph taken by the evaluation team, August 30, 2023.

⁸ GSA describes NCMMS as a system that maintains information about each building's maintenance operations to help GSA maintain the facilities effectively, to plan and track building equipment inventories, maintenance schedules, work orders, and service requests. However, the Desk Guide allows for regions to maintain the current inventory, as required in the Operations & Maintenance specification, for GSA owned and operated facilities where the NCMMS is not fully deployed, until such time as the information is migrated to the NCMMS.

facility levels.⁹ In practice, regional environmental, health and safety managers rely on building operations personnel to develop and maintain the fuel storage tank inventory at the individual facility level. Additionally, the Order requires that building operations personnel or contractors maintain all fuel storage tank records, including maintenance and monitoring records, work orders, and inspection reports in NCMMS.¹⁰

Between May 23, 2018, and February 10, 2023, GSA received 46 citations from state and federal regulators regarding its fuel storage tanks. These citations ranged from warnings to notices of violations related to federal, state, and local requirements. For fuel storage tanks located at GSA owned or leased facilities, contractors often perform services such as installation, operations & maintenance, removal, and closure. As specified in the Order, only qualified licensed contractors are permitted to perform fuel storage tank repairs, removals, abandonments, or closures.¹¹ GSA is liable for work performed by its contractors, which requires building managers to provide oversight to ensure compliance with the Order.¹²

Building operations personnel, at a minimum must ensure that:

- tests and inspections of aboveground storage tanks are completed on a routine basis and when repairs are made. In the absence of an established frequency, have aboveground storage tanks tested or inspected by a third-party at least every three years, and,
- monthly in-house visual inspections of aboveground storage tanks, and monthly visual inspections of exposed portions of underground storage tank systems are conducted and documented.¹³

PBS must also “[e]nsure that [fuel storage tanks] at GSA owned facilities comply with all applicable Governing Standards,” which includes the NFPA codes and standards.¹⁴ NFPA rules cover installation and operation standards for storage tanks, oil handling systems, and oil burning equipment. The rules include the use of applicable NFPA markings. NFPA 704, *Standard System for the Identification of the Hazards of Materials for Emergency Response*, hazard identification system uses a four-part colored “diamond” shape to identify the severity of health (blue), flammability (red), and instability (yellow) hazards, and any special hazards (white). Within each hazard, with the exception of white, there is a numeric hazard rating of 0 (minimal) to 4 (severe). NFPA markings identify hazardous materials with visible signs and markings to ensure first responders can quickly determine the hazard level of the contents of the tank.

⁹ Desk Guide, at page 2.

¹⁰ Order, at page 4.

¹¹ *Id.*, at page 3.

¹² Desk Guide, at page 2.

¹³ *Id.*, at pages 4 and 6.

¹⁴ Order, at page 3.

PBS's Order and Desk Guide provide guidance for regional and building operations personnel to ensure GSA has a complete and accurate inventory of fuel storage tanks, fuel storage tanks are properly maintained, and any issues with the fuel storage tanks or associated parts are quickly identified and rectified.

Our evaluation examines PBS's management of GSA's fuel storage tank inventory, recordkeeping, and compliance with NFPA marking standards.

Findings

Finding 1. PBS does not have a complete, accurate, or consistent inventory of fuel storage tanks.

GSA requires that fuel storage tank inventories are maintained within NCMMS.¹⁵ In practice, GSA building operations personnel are responsible for ensuring that the fuel storage tanks are completely and accurately inventoried for their building. However, we found that the NCMMS fuel storage tank inventories are not complete or accurate. We also found that each region manages their inventories differently, collects different information on the fuel storage tanks, and does not update inventory records accurately.

Regional Fuel Storage Tank Inventories are Incomplete and Inconsistent

On May 16, 2023, we independently obtained the fuel storage tank inventory listing from NCMMS. On June 6, 2023, PBS's Facility Risk Management Division provided each region's fuel storage tank inventory via 12 workbooks.¹⁶ We found that the 12 workbooks did not match the inventory exported from NCMMS, at a regional or agency level. NCMMS showed an inventory of 1,039 fuel storage tanks, while the workbooks showed a total of 1,134. The PBS Environmental Program Expert told us that the NCMMS data was not good and explained that discrepancies may be caused by users not trusting the system or the regions not uploading information, she also stated that everyone has their own "fiefdom."

We also found that the regions' workbook data entries for fuel storage tanks were inconsistent from region to region. For example, some regions listed asset numbers to identify each fuel storage tank, while others omitted this information entirely. As a result, there was no way to accurately match the workbook inventories to the NCMMS inventory. Collectively, we found that the inventory workbooks identified 95 more fuel storage tanks than shown in NCMMS. Table 1 below shows the comparison of the inventories.

¹⁵ *Id.*, at pages 3-4.

¹⁶ PBS provided two separate workbooks for Region 11, and one workbook per region for the remaining 10 regions.

Table 1. Comparison of NCMMS data and regional inventories

Region	NCMMS (May 16, 2023)	Regional Inventory (June 8, 2023)	Net Discrepancy
1	63	53	-10
2	178	117	-61
3	118	160	+42
4	93	116	+23
5	56	88	+32
6	37	56	+19
7	61	115	+54
8	90	55	-35
9	116	92	-24
10	68	90	+22
11	159	192	+33
Totals	1,039	1,134	+95

Due to the inventory discrepancies between NCMMS and the workbooks, we conducted site visits to 13 locations across Regions 4, 9, and 11 to validate the number of fuel storage tanks at a sample of facilities. (See Appendix B for locations.)

Inconsistent, Incomplete, and Inaccurate Building Fuel Storage Tank Inventories

We found that 9 of the 13 locations visited did not have a consistent, complete, or accurate inventory for fuel storage tanks in NCMMS. For example, a Region 9 location, did not have any fuel storage tanks inventoried in NCMMS; however, we observed firsthand eight fuel storage tanks when we visited in July 2023.¹⁷ A Region 9 Building Manager, who is responsible for ensuring an accurate inventory in NCMMS, stated he did not know who input the information into NCMMS but added that a contractor typically accomplished it, and that, “I don’t really trust any of the data in NCMMS.”

During our Region 4 site visits, we found building operations personnel were not including belly tanks in their NCMMS fuel storage tank inventories. Belly tanks are storage containers that are connected to the actual generator and hold fuel to operate the generator. (See Image 2 for an example of a belly tank.)

¹⁷ The eight fuel storage tanks observed validated the fuel storage tank inventory in the Region 9 workbook provided by the Facility Risk Management Division.

Image 2. Belly tank below an emergency generator.¹⁸



In March 2023, Region 4 Environmental Protection Specialists provided training to regional personnel responsible for fuel storage tanks. The training specifically explained that fuel storage tanks include belly tanks, as well as tanks on or above the floor of underground areas, and underground storage tanks. We found that all locations visited in Region 4 had some variation of a belly tank or a day tank. A day tank is a smaller tank that can store one day of fuel. The PBS Environmental Program Expert agreed that day tanks were to be included in NCMMS as fuel storage tanks. Despite the previous training, six of the seven Region 4 facilities visited were not including belly or day tanks in either the NCMMS or the regional fuel storage tank inventory. Ultimately, we found that only two regions we inspected accurately identified the belly and day tanks as fuel storage tanks in their regional inventory.

We also found that the status of fuel storage tanks was not always updated in NCMMS when tanks were physically removed from a site or made inactive. For example, at a Region 1 location, NCMMS data showed one fuel storage tank with an “operating” status. However, when we visited in August 2023, we did not observe any fuel storage tanks on the premises. Following the site visit, a PBS project manager provided information to show that in 2016 GSA removed the underground fuel storage tank at that location. (*See Image 3.*) Despite GSA having the fuel storage tank physically removed in 2016, NCMMS still showed the fuel storage tank as active seven years later.

Image 3. 2016 fuel storage tank removal.¹⁹



¹⁸ Photograph taken by the evaluation team, July 19, 2023.

¹⁹ Photograph taken by GSA project manager, September 12, 2023.

The Region 1 Regional Environmental, Health, and Safety Manager said he understood that NCMMS was the repository of record for fuel storage tank records but that he did not use NCMMS because it was too complicated, and he did not think anyone else used it either. He told us that Region 1 maintained their fuel storage tank inventory in their Google Drive.²⁰

Persistent NCMMS Data Discrepancies

According to the PBS Environmental Program Expert, the intent was to include 72 data points for fuel storage tank inventory in NCMMS; however, NCMMS was not configured to receive all 72 data points because it was originally commissioned to function as a maintenance tracking system and did not have a way to distinguish between types of tanks, which lead to misidentifying information. The classification of tanks was added in 2022.

Additionally, the PBS Environmental Program Expert told us that users not trusting the system, or regions not uploading information, may cause discrepancies. Regional personnel consistently expressed their frustration with NCMMS, and in at least one case the building operations personnel in Region 11 did not have access to NCMMS to view or update fuel storage tank data. Whereas a Region 9 building manager stated that contractors have had to recreate the data because the transfer of the fuel storage tank inventory into NCMMS was a mess.

The PBS Environmental Program Expert told us that an inaccurate inventory could result in the potential for unknown fuel leaks, fines from regulatory agencies for not registering fuel storage tanks, financial liability, and a limited ability for GSA to properly manage their fuel storage tanks. Without a consistent, complete, and accurate fuel storage tank inventory, GSA's risk for potential unknown leaks, and both financial and environmental liability, increase when they are unable to identify fuel storage tanks at a location.

Finding 2. Reclassification of Fuel Storage Tanks asset type resulted in more inaccuracies in NCMMS.

In August 2023, while our evaluation was ongoing, the PBS Facility Technology and Innovation and the Facility Risk Management Divisions reclassified the asset types for fuel storage tanks in NCMMS in an effort to clean up the database. The reclassifications changed the designations for aboveground and underground storage tanks (AST and UST) to just fuel oil storage (FOL). Following the reclassification, on August 7, 2023, we again independently obtained an inventory report from NCMMS, this time using the new asset type for fuel oil storage. Table 2 below provides a comparison of NCMMS inventories from May 16, 2023, and August 7, 2023.

²⁰ The Region 1 inventory workbook accurately showed that there was no fuel storage tank at that Region 1 location.

Table 2. Comparison of NCMMS Inventories after reclassification

Region	NCMMS (May 16, 2023)	Reclassified NCMMS (August 7, 2023)	Discrepancy
1	63	136	+73
2	178	176	-2
3	118	113	-5
4	93	97	+4
5	56	71	+15
6	37	45	+8
7	61	71	+10
8	90	84	-6
9	116	138	+22
10	68	86	+18
11	159	166	+7
Totals	1,039	1,183	+144

The PBS Environmental Program Expert told us in August 2023, that a lot of assets designated as fuel oil storage in NCMMS at that point were incorrect. Despite knowing that the reclassification did not correct the database, the Facilities Risk Management Division did not communicate the reclassification or errors to the regions. In many cases, the building managers for the facilities we visited in Regions 1 and 6 found out about the reclassification during our site visits several weeks later.

Due to the reclassification of fuel storage tank asset types during our evaluation, we expanded our scope to include a judgmentally selected sample of an additional 12 facilities across Regions 1, 6, and 11 to validate the number of fuel storage tanks at each location.²¹ We found that two of the additional 12 facilities had an accurate NCMMS inventory after the asset type reclassification; however, the remaining 10 facilities had inaccurate NCMMS inventories. At one Region 6 facility, after the reclassification, NCMMS showed seven fuel storage tanks when the May 16, 2023, NCMMS inventory showed none. In August 2023, we conducted a site visit to that Region 6 facility and validated that there were no active fuel storage tanks. The building manager at this location said that GSA abandoned one fuel storage tank in place prior to the year 2000 and that fuel storage tank was not on any active inventory. A Region 6 building manager told us that they previously updated the NCMMS inventory, and six months later, it reverted to the previous inventory, adding that the reversion had happened more than once.

In addition to not correcting the database, we found that the reclassification of fuel storage tank asset types in NCMMS had unintended consequences on the operations and maintenance of the tanks. In NCMMS each asset type has an associated preventive maintenance guide template, and that guide includes information on maintenance frequency. However, after the reclassification a different preventative maintenance template is now associated with the tanks than what was previously provided in NCMMS. The new preventative maintenance guide recommends a maintenance schedule of once every four years, regardless of whether the tanks are above or

²¹ See Appendix B for a list of the additional 12 locations.

below ground. Whereas the guide for the previous aboveground fuel storage tank asset type recommended four preventative maintenance cycles that included monthly, annual, three-year, and five-year routines, and the guide for the underground storage tank asset type had recommended three preventive maintenance cycles that included monthly, bimonthly, and three-year routines.

In another instance, after a full tank inventory earlier in 2023 at a Region 1 facility, each asset was assigned a laminated tag that included both the fuel storage tank's asset number and its equipment identification (ID).²² (See Image 4 below.) Following the reclassification the asset tags had the correct asset numbers, but no longer matched the equipment ID in NCMMS. (See Image 5 below.)

Image 4. Asset tag for a fuel storage tank at the Region 1 building²³

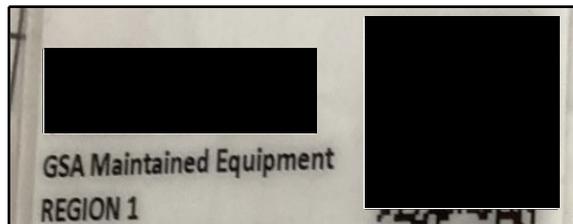


Image 5. NCMMS asset entry for a fuel storage tank at the Region 1 building.²⁴



The reclassification of fuel storage tank asset type did not improve the accuracy of the NCMMS inventory. Instead, the reclassification created additional discrepancies in the fuel storage tank inventories and in at least some instances incorrectly assigned the wrong preventative maintenance guides.

Finding 3. Documentation missing, not current, incomplete, or not maintained.

Each GSA building where GSA owned and/or operated fuel storage tanks are housed is required

²² A Project Manager explained that an assets equipment ID is created by combining an asset's building number, asset type, and a unique value.

²³ Photograph taken by the evaluation team, August 29, 2023.

²⁴ Source: NCMMS, September 26, 2023.

*Building-specific information has been redacted for security reasons at the request of PBS.

to develop and maintain a tank management plan.²⁵ The Desk Guide recommends that building operations personnel develop the tank management plan for all tanks for which they are responsible.²⁶ Additionally, building operations personnel, at a minimum, are required to conduct and document monthly in-house visual inspections of aboveground storage tanks, and of exposed portions of underground storage tank systems.²⁷ Building operations personnel or contractors are to maintain all fuel storage tank records, including maintenance and monitoring records, work orders, and inspection reports within NCMMS.²⁸

We found that building operations personnel did not have a tank management plan for the fuel storage tanks under their purview, the tank management plans were not complete, or the tank management plans were not current. Furthermore, we found that GSA contractors are inconsistently completing monthly visual inspections and that personnel are not reviewing the monthly visual inspections to identify inconsistencies or issues. Finally, we found that building operations personnel and contractors are generally not maintaining these documents in NCMMS as required.

Fuel Storage Tank Management Plans are Missing, Incomplete, or Not Current

The Desk Guide requires the development and maintenance of a tank management plan specific to each building where GSA owns or operates fuel storage tanks.²⁹ The Desk Guide states:

The tank management plan may be in the form of a single page document that serves as an index to identify the location of the readily available components of the plan, or it can be a compilation document containing a combination of an index and documents. Regardless of design, the preferred format is electronic. In addition, this plan shall be updated whenever a change requiring notification occurs and stored in a location where it is readily accessible to Regional EHS [Environmental, Health and Safety] Managers.³⁰

Of the 23 facilities we visited that were required to have a Fuel Storage Tank Management Plan, we found:

- 11 did not have a Fuel Storage Tank Management Plan; and
- 12 had a Fuel Storage Tank Management Plan, but it was not complete, current, or accurate.

²⁵ Desk Guide, at page 9.

²⁶ *Id.*, at page 2.

²⁷ *Id.*, at pages 4 and 6.

²⁸ Order, at page 3 and 4, and Desk Guide, at page 11.

²⁹ Desk Guide, at page 9.

³⁰ *Id.*

We found plans were incomplete due to missing required information, such as GSA building number, installation year, date of permitting, and piping and release detection details, while other Fuel Storage Tank Management Plans contained incorrect information, such as fuel storage tank capacity exceeding the fuel storage tank permit. In other cases, the Fuel Storage Tank Management Plans did not contain current information, such as points of contact or phone numbers in the event of an emergency.

The Fuel Storage Tank Management Plan should provide information to ensure that building operations personnel and contractors can quickly and appropriately respond to an emergency. Without a complete and accurate Fuel Storage Tank Management Plan, building operations personnel and contractors may not take the necessary steps to handle a fuel storage tank leak or spill quickly and appropriately. Furthermore, without an accurate and complete plan, building operations personnel and contractors lack the necessary contact information to notify the proper officials in the event of an emergency, leak, or spill.

Fuel Storage Tank Inspection Documentation was Not Accurate

We found that facilities within the five regions we visited were not using the monthly visual inspections as intended. Specifically, contractors completed the inspection documentation but the contractors inconsistently or inaccurately interpreted checklist questions.

At one Region 4 facility we reviewed, the monthly visual inspection report was completed the week prior to our visit. The report indicated everything was in good working order, but the contractor left a comment at the bottom of the inspection form that stated, “monitor wires not installed reported in IDL [initial deficiency list] GSA has been notified.” On the day of our site visit we found the overfill alarm for the fuel storage tank was not wired as required.³¹ In order to mitigate the improper wiring, the contractor told us he did daily inspections, so he would notice a leak. He said that if something happened between his daily inspections the security guard would notify him or the building manager if they saw anything leaking out of the room.

We found some of the inspection report responses did not appropriately reflect the contractors’ inspections. At another Region 4 facility, a contractor checked both “yes” and “no” in response to the same questions regarding the existence of equipment on the monthly inspection document. We verified that the fuel storage tank had the equipment identified in the question. However, when asked, the contractor conducting the inspections told us that he could not erase the incorrect answer, so he also marked the correct answer. The contractor’s manager was not aware of the inconsistent responses until we reviewed the documentation with him. Whereas at a different facility in Region 4, the contractor conducting the monthly visual inspections only marked “yes” if they had to take an action. At yet another Region 4 facility, the contractor answered “no” to the question about piping exterior not being corroded or damaged; however, we observed firsthand corrosion on the pipes to the tank and generator.

The monthly inspection checklists are an important tool to provide assurance that the fuel storage tanks are properly maintained and in working order.

³¹ Order, at page A-1.

Fuel Storage Tank Inspection Documentation Not in NCMMS

To provide greater protection against potential future environmental liabilities, the Order requires that all fuel storage tank records be maintained for the life of the facility.³² In the case of inspections, all records of compliance with federal, state, and local regulatory requirements are required to be readily available and kept within NCMMS.³³ At one Region 11 facility, the building manager and contractor told us they did not have access to NCMMS. The contractor further explained that they did not have any of the documentation for fuel storage tanks because the previous contractor directed him to destroy the documents when they lost the contract. We confirmed that none of the information for the fuel storage tanks was available in NCMMS.

In another instance, a Region 4 facility experienced a flood in April 2023, destroying documents, including fuel storage tank related records. Unfortunately, since the facility did not maintain all the documentation in NCMMS, the building manager and contractors were unable to provide essential information for the fuel storage tank on site. Specifically, NCMMS did not contain all of the monthly inspections, manufacturer information, or the fuel storage tank management plan.

At one Region 6 facility, building operations personnel and contractors were not managing the fuel storage tank documentation in NCMMS as required, and instead were using a Google Drive to send a monthly report to the building manager for all work performed each month. According to the contractor, NCMMS archives work orders after six months, which leads to the appearance of contractors not completing work orders in NCMMS as required. However, the NCMMS project manager told us that at a minimum the system carried 13 plus months of data.

The building operations personnel and contractors' failure to maintain all fuel storage tank records in NCMMS for the life of the facility increases GSA's risk for financial and environmental liabilities.³⁴

Finding 4. Inconsistent or missing NFPA markings on tanks.

The Desk Guide requires that fuel storage tank design, installation, and operation are accomplished in accordance with all applicable industry standards and local codes, including applicable rules set forth in NFPA and the International Fire Code.³⁵ NFPA rules cover installation and operation standards for storage tanks, oil handling systems, and oil burning equipment. NFPA 30, *Flammable and Combustible Liquids Code*, 2018 Edition, provides guidance on markings for storage tanks containing ignitable (flammable or combustible) liquids

³² Desk Guide, at pages 10 and 11.

³³*Id.*, at page 10

³⁴ *Order.*, at page 4.

³⁵ Desk Guide, at pages 3 and 4.

which include fuel storage tanks:

The marking shall be located where it can be seen, such as on the side of the tank, the shoulder of an accessway or walkway to the tank or tanks, or on the piping outside of the diked area. If more than one tank is involved, the markings shall be so located that each tank can be identified.³⁶

The NFPA markings enable first responders to easily decide whether to evacuate the area or to commence emergency control procedures, while also providing information to assist in determining firefighting tactics and emergency procedures.

We found that none of the five regions visited consistently applied the NFPA markings. In some cases, the NFPA markings were either missing or the markings were inconsistent between the signage on or near the fuel storage tanks. For example, in Region 9 we found two facilities with multiple NFPA markings either on the fuel storage tank or the wall surrounding the fuel storage tanks. The contractors at the first facility did not know why the fuel storage tank had two different NFPA markings. At the second facility, the entrance to one of the fuel storage tanks showed only one NFPA marking, while the walls inside showed two different NFPA markings. The contractor did not know who added the conflicting NFPA markings, but he told us they were added as result of a county inspection.

At a Region 6 facility the building manager told us that he purchased NFPA markings from a national retailer just prior to our site visit and put them on the door to the fuel storage tank. However, the NFPA markings displayed on the door to the fuel storage tank area had two different ratings for health hazards. The hazard diamond on the left indicated a severity rating of “2,” while the hazard diamond on the right indicated a severity rating of “1.” A rating of 2 indicates a moderate hazard, versus a rating of 1 indicates a slight hazard. (See Image 6.)

Image 6. The door to the fuel storage tank.³⁷



³⁶ NFPA 30, *Flammable and Combustible Liquids Code*, 2018, at page 30-75, Section 21.7.2.1.

³⁷ Photograph taken by the evaluation team, August 30, 2023.

The Order requires compliance with applicable NFPA guidance for fuel storage tanks. It is imperative that building operations personnel ensure that signage and markings comply with NFPA requirements so that first responders have accurate information in the event of an emergency.

Conclusion

PBS is not effectively administering the Fuel Storage Tank Management Program and cannot provide assurance that they are properly maintaining the tanks. We found that GSA does not have an accurate fuel storage tank inventory because the regions are not adhering to the requirement to maintain the tank inventory in NCMMS, and the reclassification of the fuel storage tank asset type in NCMMS resulted in known errors. Without a complete and accurate inventory, OFM may not be inspecting or maintaining all fuel storage tanks as required.

Additionally, for the fuel storage tanks that are known, GSA is not ensuring that building operations personnel are developing and maintaining Fuel Storage Tank Management Plans to provide necessary instructions in the event of a leak or spill. Furthermore, at numerous facilities building operations personnel and contractors are improperly completing monthly visual inspections and are not following up or completing the actions needed to maintain the fuel storage tanks.

Lastly, OFM did not ensure that fuel storage tanks are properly marked with NFPA signage, which provides critical information about the contents of the fuel storage tanks in the event of an emergency. PBS's poor management of the fuel storage tanks increases the risk for potential unknown leaks, and both financial and environmental liability.

Recommendations

The PBS Commissioner should:

1. Complete a thorough and accurate inventory of all fuel storage tanks across GSA's facilities and ensure that the inventory is updated in the National Computerized Maintenance Management System, to include the proper asset type description in the database.
2. Develop Fuel Storage Tank Management Plans in accordance with GSA policies and procedures.
3. Develop a quality control system to ensure that the required actions and documentation to maintain fuel storage tanks are completed and included in the National Computerized Maintenance Management System as required by GSA policies.
4. Ensure compliance with National Fire Protection Association marking standards.

Appendix A - Objectives, Scope, and Methodology

On May 16, 2023, the Office of Inspections initiated an evaluation of PBS's Fuel Storage Tank Management Program. The objective for this evaluation was to determine if PBS was effectively managing the Fuel Storage Tank Management Program.

To accomplish our objectives, we:

- Researched laws, rules, regulations, and other federal guidance on the management of fuel storage tanks;
- Reviewed relevant audits and inspections conducted by GSA OIG, and other federal agencies;
- Interviewed GSA staff in the PBS, Office of Facilities Management;
- Conducted in-person site visits and interviews in regions 1, 4, 6, 9, and 11; and
- Reviewed documentation for a judgmental sample of fuel storage tanks within each of the five regions.

To scope our evaluation, we initially judgmentally selected for inspection 13 facilities with fuel storage tanks across Regions 4, 9, and 11, based NCMMS inventory data from May 16, 2023. In August 2023, OFM updated NCMMS. We reviewed the updated NCMMS fuel storage tank inventory on August 7, 2023, and found significant discrepancies between the May 16, 2023, and the August 7, 2023, data. As a result, we expanded our scope and judgmentally selected 12 additional facilities across Regions 1, 6, and 11. We conducted site visits to validate the number of fuel storage tanks at each facility and to determine whether the locations were implementing PBS's Fuel Storage Tank Management Program effectively. See Appendix B for a list of the 25 facilities visited during our evaluation. While the non-statistical judgmental sample does not allow for projection of the results, it allowed us to address our evaluation objectives.

We conducted this evaluation in accordance with the Council of the Inspectors General on Integrity and Efficiency, *Quality Standards for Inspection and Evaluation*, issued December 2020.

Appendix B – Site Visit Locations

Table B.1 compares the NCMMS fuel storage tank inventory from May 16, 2023, the regional inventories provided on June 6, 2023, and the number of fuel storage tanks validated during our site visits in July 2023.

Table B.1 – Comparison of NCMMS Inventory, Regional Inventories, and Validated

	Region	Building Number(s)	Location	NCMMS Inventory (May 16, 2023)	Regional Inventory (June 6, 2023)	Validated (July 2023)
1	4	[REDACTED]	[REDACTED]	1	1	2
2	4	[REDACTED]	[REDACTED]	2	1	2
3	4	[REDACTED]	[REDACTED]	2	1	2
4	4	[REDACTED]	[REDACTED]	2	2	3
5	4	[REDACTED]	[REDACTED]	2	2	2
6	4	[REDACTED]	[REDACTED]	1	1	2
7	4	[REDACTED]	[REDACTED]	0	1	2
8	9	[REDACTED]	[REDACTED]	1	3	3
9	9	[REDACTED]	[REDACTED]	0	9	8
10	9	[REDACTED]	[REDACTED]	2	2	2
11	9	[REDACTED]	[REDACTED]	8	2	2
12	9	[REDACTED]	[REDACTED]	3	5	6
13	11	[REDACTED]	[REDACTED]	13	4	2

Table B.2 compares the NCMMS inventory from May 16, 2023, the regional inventories provided on June 6, 2023, the NCMMS inventory from August 7, 2023, and the number of fuel storage tanks validated during our site visits in August and September 2023.

Table B.2 – Comparison of NCMMS Inventories, Regional Inventories, and Validated

	Region	Building Number(s)	Location	NCMMS Inventory (May 16, 2023)	Regional Inventory (June 6, 2023)	Reclassified NCMMS Inventory (August 7, 2023)	Validated (August and September 2023)
14	1	[REDACTED]	[REDACTED]	4	3	4	4
15	1	[REDACTED]	[REDACTED]	1	0	1	0
16	1	[REDACTED]	[REDACTED]	0	0	4	3
17	1	[REDACTED]	[REDACTED]	5	4	7	5
18	6	[REDACTED]	[REDACTED]	3	1	3	1
19	6	[REDACTED]	[REDACTED]	0	0	7	0
20	6	[REDACTED]	[REDACTED]	6	4	1	5
21	6	[REDACTED]	[REDACTED]	3	2	3	2
22	11	[REDACTED]	[REDACTED]	23	31	26	24
23	11	[REDACTED]	[REDACTED]	0	4	2	4
24	11	[REDACTED]	[REDACTED]	4	4	1	1
25	11	[REDACTED]	[REDACTED]	5	4	2	3

*Both buildings were on the same property and the one UST at the location fed both buildings; therefore, we counted it as one location.

Appendix C: Management Comments

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Public Buildings Service

July 26, 2024

MEMORANDUM FOR: PATRICIA D. SHEEHAN
ASSISTANT INSPECTOR GENERAL FOR INSPECTIONS (JE)
OFFICE OF INSPECTOR GENERAL

FROM: ELLIOT DOOMES 
COMMISSIONER (P)
PUBLIC BUILDINGS SERVICE

SUBJECT: Response to the GSA Office of Inspector General Draft Report,
*Public Buildings Service Is Not Effectively Administering the Fuel
Storage Tank Management Program (JEF23-004-000)*

Thank you for the opportunity to comment on the Office of Inspector General (OIG) draft report, *Public Buildings Service Is Not Effectively Administering the Fuel Storage Tank Management Program*. Proper management and administration of the Fuel Storage Tank Program is of great importance to the Public Buildings Service (PBS).

PBS is currently in the process of revising the policy and guidance documents and will address the OIG's findings and recommendations through the issuance and implementation of the revised documents.

As discussed during the exit conference, PBS requests that all building-specific references, such as building numbers and locations, be redacted from the publicly available documents due to security concerns. Please find our responses to the specific recommendations included in the draft report below.

OIG Recommendations

1. **OIG recommends that the PBS Commissioner complete a thorough and accurate inventory of all fuel storage tanks across GSA's facilities and ensure that the inventory is updated in the National Computerized Maintenance Management System, to include the proper asset type description in the database.**

PBS agrees with the recommendation and will take steps to update the fuel storage tank inventory in the National Computerized Maintenance Management System.

2. **OIG recommends that the PBS Commissioner develop Fuel Storage Tank Management Plans in accordance with GSA policies and procedures.**

PBS agrees with the recommendation and will evaluate alternative approaches to capture the data currently required in the Fuel Storage Tank Management Plan.

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3. **OIG recommends that the PBS Commissioner develop a quality control system to ensure that the required actions and documentation to maintain fuel storage tanks are completed and included in the National Computerized Maintenance Management System as required by GSA policies.**

PBS agrees with the recommendation and will develop a process to address this concern.

4. **OIG recommends that the PBS Commissioner ensure compliance with National Fire Protection Association marking standards.**

PBS agrees with the recommendation and will address the implementation of the NFPA marking standards.

Thank you again for the opportunity to review and comment on the draft report.

If you have any questions, please contact Brad Short, Facility Risk Management Director (Acting), Office of Facilities Management, at bradley.short@gsa.gov.



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