



U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

INSPECTION REPORT

Government Vehicle Utilization at Lawrence
Livermore National Laboratory

INS-O-15-01

October 2014



Department of Energy
Washington, DC 20585

October 7, 2014

MEMORANDUM FOR THE ADMINISTRATOR, NATIONAL NUCLEAR SECURITY
ADMINISTRATION

A handwritten signature in black ink, appearing to read "Rickey R. Hass", is positioned above the "FROM:" field.

FROM: Rickey R. Hass
Deputy Inspector General
for Audits and Inspections

SUBJECT: INFORMATION: Inspection Report on "Government Vehicle
Utilization at Lawrence Livermore National Laboratory"

BACKGROUND

The Lawrence Livermore National Laboratory (LLNL) is a Department of Energy (Department) national security laboratory managed by Lawrence Livermore National Security LLC (LLNS), for the National Nuclear Security Administration. LLNL's mission is to ensure the safety and security of the Nation through applied science and technology. The Livermore Field Office is responsible for administering the contract between the Department and LLNS.

To assist in achieving its mission, LLNL maintains a transportation system, which cost approximately \$3.7 million in Fiscal Year 2013. This transportation system included approximately 770 vehicles, 554 bicycles and 4 taxis on LLNL's one-square mile campus. In accordance with a Memorandum of Understanding established in 1993 between LLNL and the General Services Administration (GSA), LLNL leased most of its vehicles from GSA on a cost reimbursable basis. In January 2011, the Secretary issued a Department Memorandum, *Management of Fleet Inventory*, challenging the Department to reduce its fleet inventory by 35 percent without sacrificing critical mission elements but ensuring cost-effectiveness across all Department sites and field offices. To comply with the memorandum, National Nuclear Security Administration (NNSA) embarked on a complex-wide effort to right-size its fleet to include a review of site requirements, budget, and inventory. NNSA did not specifically direct each site to reduce its vehicle fleets as part of the reduction effort but reported that it was able to reduce its vehicle fleet inventory on a complex-wide basis.

Given the focus on ensuring that transportation systems were cost effective and efficient, we initiated this inspection to determine if LLNL's on-site transportation system was being effectively managed.

RESULTS OF INSPECTION

We found that LLNL had not adequately considered all available options to reduce the cost of its on-site transportation system. Specifically, we found that LLNL's fleet leveling process did not

consider maximizing the use of other transportation modes when determining the minimum number of vehicles needed to satisfy programmatic requirements. As such, LLNL may have missed an opportunity to reduce its fleet of approximately 770 vehicles.

Assessment of Transportation System

While LLNL's vehicles generally met individual, site-established usage standards, LLNL did not assess the utilization of other transportation modes when determining the optimum size of its vehicle fleet. Under the Code of Federal Regulations (CFR), 41 CFR §109, *Department of Energy Property Management Regulations*, the Department is required to maintain the number of vehicles at the minimum amount necessary to satisfy programmatic requirements. To attain this goal, controls and practices shall be established to include, but are not limited to, the maximum use of motor equipment pools, taxicabs, shuttle buses, or other common service arrangements.

LLNL conducts an annual fleet leveling process to determine the overall need for the vehicles in its fleet. In the fleet leveling process, every vehicle is evaluated on an individual basis against specific utilization criteria to include number of trips per day, mileage per month, or hours operated per day. Vehicles that do not meet the utilization criteria are reassigned or removed from service. In February 2013, LLNL's fleet leveling process resulted in the reduction of approximately 1 percent of its vehicle fleet, leaving approximately 770 vehicles in its inventory. We found, however, that the LLNL fleet leveling process did not consider the maximum use of other modes of transportation consistent with 41 CFR §109.

We found that the annual fleet leveling process was compartmentalized in that it only focused on the individual vehicle utilization criteria and did not consider whether the number of trips per day and mileage per month could be reduced or eliminated by using other forms of transportation. In other words, LLNL did not consider whether mass transit modes such as increasing the use of shuttle buses and/or the taxi service would permit the reduction of individual vehicles. Furthermore, LLNL did not have adequate controls to encourage individuals to consider other modes of transportation, such as the taxi service, before using a Government vehicle. As a result, it was our view that the fleet leveling process did not achieve meaningful reductions in the number of vehicles in LLNL's fleet, a fleet which remained significant.

During our fieldwork we found that Government vehicles were frequently used to attend on-site meetings and to run on-site errands within the one-square mile boundary of the Laboratory. A LLNL official told us that Laboratory employees did not often use the existing taxi service for these types of trips because it was more time efficient to use a Government vehicle than to wait for a taxi.

Impact

By not considering the maximum use of other transportation modes during the fleet leveling process, LLNL likely missed an opportunity to identify cost savings and further reduce its fleet. In Fiscal Year 2013 alone, LLNL spent approximately \$3.7 million for its transportation system, to include \$3.3 million for the cost of vehicles; \$268,000 for the cost to operate the taxi services;

and \$138,000 for the cost to operate and maintain the bicycles. Maximizing other modes of transportation could have identified opportunities for LLNL to further reduce its vehicle fleet, which represented nearly 90 percent of the cost of its total transportation system.

RECOMMENDATIONS

To address the issues identified in this report, we recommend that the Acting Manager, Livermore Field Office ensure that LLNL:

1. Determine the minimum number of vehicles necessary to accomplish LLNL's mission, and establishes controls and practices consistent with the requirements of 41 CFR §109 that include the maximum use of motor equipment pools, taxicabs, shuttle buses or other common service arrangements.
2. Conduct its fleet leveling process in a manner that considers whether the number of vehicle trips per day and mileage per month could be reduced or eliminated by maximizing the use of other modes of transportation.

ADDITIONAL MATTERS

During the course of our inspection, we also noted that GSA Bulletin Federal Management Regulation (FMR) B-30, *Motor Vehicle Management*, stipulates that the Department must conduct a user utilization survey to consider alternatives to owning or leasing vehicles such as shuttle bus services, motor pool vehicles, and public transportation. However, as noted in our audit report on *The Department's Fleet Vehicle Sustainability Initiatives at Selected Locations*, (DOE/IG-0896, October 2013), the Department had not conducted the required utilization survey. In response to our report, the Department and the NNSA concurred with our recommendation to conduct an agency level utilization survey as required by the GSA Bulletin. At the time of our fieldwork, NNSA indicated that it was in the process of conducting a review of the fleet utilization standards development processes at each site.

We also found that LLNL could improve its procedures designed to ensure the proper use of fuel cards for Government vehicles and equipment. Details regarding the fuel card issue are discussed in Attachment 1.

SUGGESTED ACTION

To further address the most practical and economical utilization of motor vehicles and the determination of the minimum number of vehicles necessary to accomplish a site's mission, we suggest that the NNSA Associate Administrator for Infrastructure and Operations:

1. Ensure that the provisions of GSA Bulletin FMR B-30 regarding the consideration of alternatives to owning or leasing vehicles such as shuttle bus services, motor pool vehicles, and public transportation are incorporated into NNSA's on-going review of the fleet utilization standards development process at each site.

MANAGEMENT REACTION

Management concurred with each of the report's recommendations and the suggested action. Management identified planned corrective actions as well as actions that have been initiated and completed to address the issues identified in our report. Management's formal comments are included in Attachment 4.

INSPECTOR COMMENTS

Management's planned and completed corrective actions are responsive to the report's findings, recommendations and the suggested action.

Attachments

cc: Deputy Secretary
Under Secretary for Nuclear Security
Chief of Staff

OTHER MATTERS: OVER THE TANK TRANSACTIONS

We observed that the Lawrence Livermore National Laboratory (LLNL) did not ensure procedures were adequate to address over the tank fuel transactions when fueling Government vehicles. We noted that LLNL operated its own on-site fueling station and purchased fuel for its vehicles and gasoline operated maintenance equipment (such as lawnmowers). To track fuel usage, LLNL assigned each vehicle an on-site fuel card, as well as separate fuel cards for maintenance equipment. Tracked vehicle fuel costs were subsequently reimbursed by the General Services Administration (GSA). Fuel costs for maintenance equipment and over the tank fuel transactions were not reimbursed by GSA.

Specifically, GSA identified 127 instances (from October 2011 to February 2013) where fueling of Government vehicles exceeded the vehicle's tank capacity resulting in GSA billing LLNL approximately \$27,000 for these over the tank transactions. Each leased GSA vehicle at LLNL has a specific fuel tank capacity documented and tracked by GSA. Through an electronic system, LLNL sends monthly vehicle fuel transaction data to GSA; GSA then uses this data to reimburse LLNL for fuel costs. According to a GSA official, over the tank fuel transactions are not reimbursed because there is no way for GSA to determine the reason or purpose for the additional fuel expended. For example, if LLNL charged 30 gallons of fuel to a leased vehicle that only had a 20 gallon tank capacity, GSA would categorize this as an over the tank transaction and charge LLNL for the entire 30 gallon fuel transaction. If LLNL could prove that only the over the tank amount was misused, GSA would only charge LLNL for the difference between the vehicle tank capacity and the gallons procured; however, without this evidence LLNL was responsible for the entire amount charged. In March 2013, GSA worked with LLNL to verify and correct the tank capacity data of vehicles that had over the tank transactions. However, even with the corrections, GSA billed LLNL approximately \$27,000 for over the tank transactions.

This occurred, in part, because LLNL's *Fleet Management Policies and Procedures* did not address the proper use of fuel cards. In addition, we noted that there was a lack of understanding on the part of Laboratory employees with regard to the separation of fuel cards for vehicles and those for equipment. Employees may have filled up their Government vehicles and equipment with the same fuel card on the same transaction, potentially contributing to the instances of over the tank transactions GSA identified. A LLNL official said this may have occurred because there is one shared equipment fuel card for a group, and if an individual does not have access to the equipment fuel card at the time, the individual may have fueled the equipment when fueling the vehicle. The official also said that double fueling may have caused over the tank charges. This official told us that although drivers are not supposed to do this, double fueling can occur when two different vehicles are fueled using one vehicle fuel card.

As a result of LLNL's failure to address the proper use of fuel cards, GSA billed back LLNL for fuel costs that otherwise would have been reimbursed. According to a GSA official, GSA billed LLNL approximately \$27,000 for over the tank transactions that had occurred from October 2011 to February 2013. Implementing effective internal controls and training on the proper use of fuel cards could have decreased the likelihood of the misuse of fuel cards and mitigated over the tank fuel charges. Without changes, LLNL will continue to spend more than necessary on fuel usage due to over the tank charges.

We noted that LLNL expressed concerns regarding over the tank fuel transactions and took steps to address this issue. Specifically, LLNL recalibrated the on-site fueling pumps to confirm that the pumps accurately dispensed the appropriate amount of fuel. LLNL also checked its computer system to ensure that the fuel transaction data was being accurately recorded. In addition, LLNL assigned an employee, on a limited basis, to monitor the on-site fueling station to manually record each fueling transaction, observe whether individuals used the proper fuel card and ensure there was no improper fueling of personal vehicles. While these improvements are noteworthy, in our view additional controls could help prevent future losses in this area.

SUGGESTED ACTION

To address the issue regarding over the tank transactions, we suggest that the Acting Manager, Livermore Field Office ensure that LLNL updates its *Fleet Management Policies and Procedures* to address the appropriate use of fuel cards for vehicles and equipment, and conducts the training necessary to ensure Laboratory employees understand the proper use of fuel cards.

OBJECTIVE, SCOPE AND METHODOLOGY

OBJECTIVE

The objective of this inspection was to determine if Lawrence Livermore National Laboratory's (LLNL) on-site transportation system was being effectively managed.

SCOPE

The inspection fieldwork was conducted at LLNL in Livermore, California from February 2013 to October 2014. The focus of the inspection was LLNL's on-site transportation system which included Government vehicles, bicycles and taxi service. The inspection was conducted under Office of Inspector General Project Number S13IS006.

METHODOLOGY

To accomplish the inspection objectives we:

- Interviewed key individuals that provided information about LLNL's fleet and on-site transportation;
- Obtained and reviewed LLNL internal documents, policies and procedures; and
- Reviewed applicable Federal regulations.

We conducted this inspection in accordance with the Council of the Inspectors General on Integrity and Efficiency, *Quality Standards for Inspection and Evaluation*, January 2012. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our inspection objective. The review included tests of controls and compliance with laws and regulations to the extent necessary to satisfy the objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our inspection. Also, we assessed LLNL's compliance with the *Government Performance and Results Modernization Act of 2010* and determined that LLNL had established performance measures. Finally, we relied on computer processed data to some extent to satisfy our inspection objective. We confirmed the validity of such data, as appropriate, by conducting interviews and reviewing source documents.

National Nuclear Security Administration management waived the exit conference.

PRIOR REPORTS

- Audit Report on [*The Department's Fleet Vehicle Sustainability Initiatives at Selected Locations*](#), (DOE/IG-0896, October 2013). The report concluded that while Los Alamos National Laboratory and the Bonneville Power Administration had taken steps designed to improve economy and reduce emissions, they had not always managed their substantial vehicle fleets in a cost-effective or efficient manner, nor did they take all prudent steps to advance the use of alternative fuels and did not optimize the size of their fleets.
- Audit Report on [*Richland Operations Office Fleet Management*](#), (WR-B-01-01, January 2001). The report concluded that Richland Operations Office vehicle fleet was not appropriate to its use, as 85 percent of the vehicles were used less than the Department of Energy's mileage standards. Also, Richland Operations Office had too many vehicles because it had not established and implemented controls required by the Department of Energy's Property Management Regulation.
- Audit Report on [*Vehicle Use at Lawrence Livermore National Laboratory*](#), (WR-B-00-07, September 2000). The report concluded that Lawrence Livermore National Laboratory's allotment of 516 on-site vehicles was too large and that randomly selected on-site discretionary vehicles did not meet the Laboratory's use standard. Also, Lawrence Livermore National Laboratory could reduce its vehicle lease costs by at least \$690,000 per year by returning vehicles that did not meet the local use standards.

MANAGEMENT COMMENTS



Department of Energy
Under Secretary for Nuclear Security
Administrator, National Nuclear Security Administration
Washington, DC 20585



MEMORANDUM FOR GREGORY H. FRIEDMAN
INSPECTOR GENERAL

FROM: FRANK G. KLOTZ *FK 9/26/2014*

SUBJECT: Comments on the Office of Inspector General Draft
Report Titled "Government Vehicle Utilization at
Lawrence Livermore National Laboratory"
(S13IS006)

Thank you for the opportunity to review and comment on the subject draft report. Based on the auditors' findings, the report provides two recommendations and two suggested actions for further enhancing LLNL's management practices in this area. The National Nuclear Security Administration concurs with those proposed actions, and the attachment to this memorandum provides the specific milestones and timelines for completion.

If you have any questions regarding this response, please contact Dean Childs, Director, Audit Coordination and Internal Affairs at (301) 903-1341.

Attachment



Attachment

The National Nuclear Security Administration Response to the IG Draft Report on “Government Vehicle Utilization at Lawrence Livermore National Laboratory”

Recommendation 1: NNSA should ensure Lawrence Livermore National Laboratory (LLNL) determines the minimum number of vehicles necessary to accomplish LLNL's mission, and establishes controls and practices consistent with the requirements of 41 CFR §109 that include the maximum use of motor equipment pools, taxicabs, shuttle buses or other common service arrangements.

Management Response: Concur

NNSA will request LLNL to re-evaluate its vehicle needs and establish controls and practices consistent with the Inspector General's recommendation. The estimated completion date for these actions will be aligned with completion of the annual fleet leveling process conducted by LLNL which will be completed by May 2015.

Recommendation 2: NNSA should ensure LLNL conducts its fleet leveling process in a manner that considers whether the number of vehicle trips per day and mileage per month could be reduced or eliminated by maximizing the use of other modes of transportation.

Management Response: Concur

NNSA will request LLNL to review/modify its fleet leveling approach to consider whether the number of vehicle trips per day and mileage per month could be reduced or eliminated by maximizing the use of other modes of transportation. The estimated completion date for these actions will be consistent with the annual fleet leveling process conducted by LLNL which will be completed by May 2015

Suggested Action 1: The Office of Infrastructure and Operations should ensure that the provisions of Government Services Administration (GSA) Bulletin FMR B-30 to consider alternatives to owning or leasing vehicles such as shuttle bus services, motor pool vehicles, and public transportation are incorporated into NNSA's on-going review of the fleet utilization standards development process at each site.

Attachment

Management Response: Concur

The NNSA Fleeting Requirements Working Group is currently in process of reviewing the efficiency of the overall NNSA fleet, having completed phase 1 (rightsizing) of the process in March 2014. Rightsizing of the NNSA fleet resulted in review of the requirements and inventory for each site, identifying at the asset level, vehicles reported in the FY 2013 Federal Automotive Statistical Tool (FAST) as mission critical or mission support. This review included consideration of GSA Bulletin FMR B-30 requirements. Based on the actions taken, NNSA considers this suggestion closed.

Suggested Action 2: NNSA should ensure that LLNL updates its Fleet Management Policies and Procedures to address the appropriate use of fuel cards for vehicles and equipment, and conducts the training necessary to ensure Laboratory employees understand the proper use of fuel cards.

Management Response: Concur

Since the time of the audit, LLNL has taken action to update its policies and procedures consistent with the improvements noted by the IG in the report. These updated documents are broadly available on the fleet website and will inform current and future training. Based on the actions taken, NNSA considers this suggestion closed.

FEEDBACK

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Office of Inspector General (IG-12)
Department of Energy
Washington, DC 20585

If you want to discuss this report or your comments with a member of the Office of Inspector General staff, please contact our office at (202) 253-2162.