

September 28, 2009

# LINDA J. WELCH ACTING VICE PRESIDENT, DELIVERY AND POST OFFICE OPERATIONS

SUSAN M. BROWNELL VICE PRESIDENT, SUPPLY MANAGEMENT

SUBJECT: Audit Report – Delivery Vehicle Fuel Management (Report Number DR-AR-09-009)

This report presents the results of our nationwide audit of Delivery Vehicle Fuel Management (Project Number 09XG002DR000). Our objective was to evaluate the business case to fuel delivery vehicles onsite using a mobile fueling<sup>1</sup> contractor rather than continuing the current practice of carriers purchasing fuel at local retail vendors using the Voyager Card. We conducted this audit based on a request from the Postal Service. See Appendix A for additional information about this audit.

# **Conclusion**

There is a favorable business case for expanding the use of mobile fueling to selected Postal Service delivery units. Our analysis determined that an expansion of the mobile fueling program would:

- Reduce carrier time used to fuel vehicles and the amount of fuel consumed when carriers deviate from their routes to obtain fuel.
- Eliminate questionable Voyager card fuel expenditures at selected Postal Service delivery units.
- Mitigate mail delays or interrupted service due to the unavailability of fuel at local fuel vendors in areas susceptible to natural disasters.

A sufficient number of mobile fueling contractors are available with the capacity to provide fuel needed in an expanded program. Further, environmental regulatory concerns can be successfully addressed through the contracting process. See Appendix B for our detailed analysis of this topic.

<sup>&</sup>lt;sup>1</sup> Fuel transported directly to delivery units by a mobile fueling contractor to refuel vehicles.

While the Postal Service currently uses mobile fueling at some locations in an emergency capacity, they had not evaluated the potential benefits and obstacles resulting from expanded use. When the Postal Service fully considers these factors at selected delivery units, it could reduce delivery operating costs by over \$23.2 million for fiscal years (FYs) 2010 and 2011. We have identified \$21,423,261 in funds put to better use and \$1,784,914 in unrecoverable supported questioned costs. See Appendix E for additional details.

We recommend the Acting Vice President, Delivery and Post Office Operations, in coordination with Vice President, Supply Management:

1. Consider as part of the Postal Service's National Fuel Purchasing Strategy expansion of mobile fueling for city and rural delivery units with 30 or more routes using Postal Service-owned vehicles, as well as other delivery units as necessary.

# Management's Comments

Management agreed with the finding and recommendation stating they will continue to use mobile refueling as part of the national fuel purchasing strategy. Management also agreed to review mobile fueling as part of the strategy and expand its use when and where it is warranted. The estimated date for completion of the fuel strategy is June 2010.

Finally, management stated it had just completed route adjustments and it would not be cost effective to make further adjustments. We have included management's comments in their entirety in Appendix G.

## **Evaluation of Management's Comments**

The U.S. Postal Service Office of Inspector General (OIG) considers management's comments responsive to the recommendation. Management's corrective actions should resolve the issues identified in the report.

Regarding the price per gallon for fuel used in our analysis, we agree with management that the \$3.95 price per gallon for fuel in 2008 was an atypical year in terms of fuel cost. However, we did not base our savings analysis on the retail price per gallon, but rather on the variance between the retail price per gallon and the bulk rate price per gallon. As we explained in the report, this price averaged 23 cents less than the retail price per gallon since October 2007. Since we accomplished our audit using 2008 data, we applied the more conservative 2008 average rate which was 15 cents per gallon less than retail. As such, the retail price per gallon has no impact on our savings amount, as long as the difference between the retail and bulk rates is 15 cents per gallon. For example, if the retail rate was \$1.25 per gallon and the bulk rate was \$1.10 per gallon, the savings in this report would not change.

Since a year-long route adjustment and inspection will soon be completed, we agree to some extent with management that it may not be cost effective to commence a second route adjustment effort in the short term. However, we contend management could adjust all of the routes over time or whenever changes which require elimination or modification to routes occur. On the other hand, if management considers mobile fueling for those units spending 2 or more hours daily for fueling vehicles, then immediate route adjustments may be warranted.

The OIG considers the recommendation significant and, therefore, requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. This recommendation should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Rita Oliver, Director, Delivery, or me at (703) 248-2100.

E-Signed by Robert Batta VERIFY authenticity with Approvelt KORLOT V. Jahon

Robert J. Batta Deputy Assistant Inspector General for Mission Operations

Attachments

cc: Patrick R. Donahoe Steven J. Forte Vice Presidents Area Operations Wayne W. Corey Bill Harris

# APPENDIX A: ADDITIONAL INFORMATION

## BACKGROUND

The Postal Service operates the largest civilian fleet in the world, with mail transportation accounting for approximately 75 percent of its total energy costs. As shown in Table 1, in FY 2008, the Postal Service operated over 221,000 vehicles, using about 90 percent of these vehicles for delivery. Transportation costs are divided almost evenly between contractor transportation and the Postal Service-owned fleet. Between 2001 and 2007, fuel consumption decreased by 178,057 gallons, while costs increased \$129 million. During this time the Postal Service spent approximately \$2.23 billion on fuel \$562 million (25 percent) of which was for gasoline. The Postal Service-owned fleet traveled an estimated 1.3 billion miles and used an estimated 123 million gallons of fuel.

Vehicle Type	Number of Vehicles
Delivery and Collection ( $\frac{1}{2}$ - 2 ton ) LHD & RHD <sup>2</sup>	197,898
Mail Transport (Tractors and Trailers)	6,455
Administrative and Other	5,906
Service (Maintenance)	5,272
Inspection Service and Law Enforcement	3,288
Mail Transport (3-11 ton)	2,228
TOTAL VEHICLES	221,047

# Table 1. Postal Service Vehicle Inventory

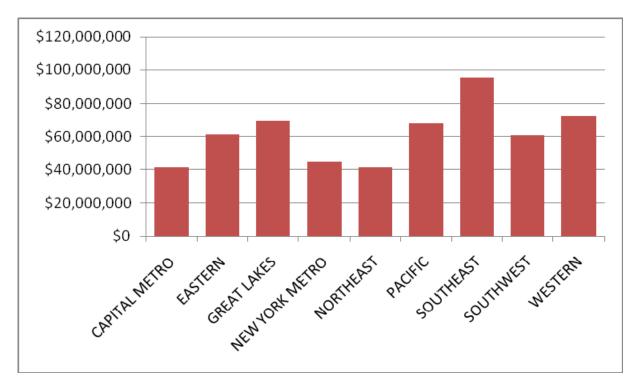
Source: Postal Service Comprehensive Statement on Postal Operations, 2008.

The Postal Service has several ways to fuel its petroleum based vehicles.<sup>3</sup> See Appendix F.

 Voyager Card (eFleet) – The Postal Service began using the Voyager Card in January 2000. As of September 2007, the Postal Service had issued approximately 250,000 cards service-wide for use at retail locations by offices without fuel storage. In FY 2008, Voyager Card transactions nationwide totaled about \$344 million for retail fuel purchases for delivery vehicles. Total gasoline purchases were \$555 million, which included rural and highway contractor routes. See Chart 1.

<sup>&</sup>lt;sup>2</sup> Left-hand drive (LHD) and Right-hand drive (RHD) delivery vehicles.

<sup>&</sup>lt;sup>3</sup> The Postal Service also has vehicles that are fueled by other sources such as electricity and compressed natural gas.



#### Chart 1. 2008 Voyager Card Purchases Nationwide

Source: Computer Assisted Assessment Techniques Continuous Monitoring System and E-Fleet.

- Bulk Fuel Purchasing The Postal Service spends approximately \$50 million annually through an interagency agreement with the Defense Energy Support Center (DESC). The Postal Service can make the following bulk fuel purchases:
  - Less than 2,000 gallons a year using local buying procedures and storing the fuel at the vehicle maintenance facility (VMF).
  - Fuel requirements between 2,000 and 20,000 gallons per year through basic pricing agreements.
  - Fuel purchases exceeding 20,000 gallons per year through DESC suppliers using delivery order agreements. The Transportation Asset Management Category Management Center issues delivery order agreements and only designated ordering individuals can place written orders<sup>4</sup> for the fuel.
- Mobile Refueling The Postal Service spends over \$30 million annually for fuel transported directly to delivery units by a mobile fueling contractor. The Postal Service stated that having these suppliers provides a reliable

<sup>&</sup>lt;sup>4</sup> Fuel orders must be made up to the maximum tank capacity and submitted though eBuy. eBuy requests can be funded for 5 years to cover the length of the contract, or 6 months to a year.

contingency service during natural disasters. Specifically, mobile refueling suppliers are able to provide emergency fueling services since their tanks are not affected by power outages or flooding. Postal Service-owned vehicles, rural route carriers, highway contractors, and postal employees' personal vehicles all have the capability of using mobile refuel service if it is available in the geographical location of the emergency. The mobile supplier charges a premium (surcharge) of between 25 cents and 40 cents per gallon to provide this service. The national average surcharge for FY 2008 was 38 cents per gallon.

The Postal Service's Supply Chain Management is responsible for mobile fueling contracts. Mobile fueling contracts require suppliers to submit an offer price to the Postal Service as a total single price per gallon. The total price should include the approved published index rate for the specific type of fuel,<sup>5</sup> taxes, and the supplier's pumping/delivery fee. Although the Postal Service is exempt from state and local taxes where permitted by state law, the supplier must include applicable fuel taxes in the state where the Postal Service site is located in their offer. The pumping/delivery fee, often referred to as the surcharge, includes all of the supplier's costs, including those associated with obtaining environment permits and profit. The pumping/delivery fee remains fixed throughout the contract and is used to validate all invoices.

## **OBJECTIVE, SCOPE, AND METHODOLOGY**

Our objective was to evaluate the business case to fuel delivery vehicles onsite, using a mobile fueling contractor, rather than continuing the current practice of carriers purchasing fuel at local retail vendors. Based on discussions with Postal Service Headquarters and our assessment of mobile contractor viability, we confined our review to delivery units with 30 or more motorized city routes and rural delivery routes as of January 2009. We identified 1,087<sup>6</sup> city and rural units meeting our criteria. For these units, we requested or obtained information from the district and other sources —such as the Web Enterprise Information System, Delivery Operations Information System (DOIS), and E-Fleet — relating to the number of motorized routes, gallons of fuel used, mileage deviation to obtain fuel, and amount of time carriers spend weekly fueling vehicles. We obtained information in relation to average retail price per gallon, mobile fueling surcharge, and bulk rate used for mobile fuel from Postal Service Headquarters and Enterprise Data Warehouse. We also used E-Fleet to obtain Voyager Card data to determine the amount of premium fuel purchased, the associated impact on cost, and the amount of fuel purchased in excess of vehicle tank capacity. Using the above information we developed a cost-saving methodology. See Appendix E.

<sup>&</sup>lt;sup>5</sup> The Postal Service solicits for the loading, delivery and dispensing of fuel (i.e., regular, unleaded, diesel, E-85) to the sites to which it awards mobile fueling.

<sup>&</sup>lt;sup>6</sup> We reviewed a total of 1,017 city units and 70 rural units. We also reviewed Postal Service-owned vehicles assigned to rural routes at 316 of the 1,017 city units.

In addition, we reviewed documentation and applicable policies and procedures with regard to E-Fleet, Voyager, retail fueling, and mobile fueling. We coordinated our review with managers and employees at Postal Service Headquarters, areas, and selected districts and units.

We conducted this performance audit from October 2008 through September 2009 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. 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 objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management officials between August 6 and 18, 2009, and included their comments where appropriate.

# PRIOR AUDIT COVERAGE

The OIG has issued three reports related to our objective:

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
Delivery Vehicle Gasoline	TD-AR-02-005	September 30, 2002	\$16 million <sup>7</sup>	The Postal Service could save money in several areas when purchasing gasoline for delivery vehicles. First, it could recover \$3,879,538 in taxes and the Southeast Area could reduce its letter carrier workhours budget by capturing over \$12 million in cost reductions anticipated as a result of outsourcing fuel delivery. Management agreed with our findings and recommendations.
Vulnerability to Fluctuating Fuel Prices Requires Improved Tracking and Monitoring of Consumption Information	GAO-07-244	February 16, 2007	N/A	The Postal Service is highly vulnerable to fuel price fluctuations, due in part to its fuel purchasing process of buying fuel as needed, often at retail locations. Although the Postal Service tracks fuel consumption through its Voyager Card and holiday air fuel programs, it has incomplete access to fuel consumption information and limited mechanisms or systems in place to help it monitor fuel usage. Management agreed with our findings and recommendations.

<sup>&</sup>lt;sup>7</sup> This OIG report did not provide an exact dollar amount for the carrier workhour budget cost reductions.

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
Management Advisory – Fuel Management Initiatives for Surface Network Operations – Fuel Purchasing Strategy	NL-MA-09-001	August 5, 2009	\$20 million	The Postal Service has taken positive steps in developing a fuel strategy to promote efficiencies and realize cost savings in purchasing fuel. However, the Postal Service has not yet fully planned and implemented the fuel strategy to accomplish the desired outcomes and has recently placed the fuel strategy on hold because of competing priorities. As a result of this delay, the Postal Service has incurred about \$20 million in unnecessary fuel acquisition costs since August 2008. Management agreed with our finding and recommendations.

# APPENDIX B: DETAILED ANALYSIS

The Postal Service has a favorable business case for expanding the use of mobile fueling to selected Postal Service delivery units. Our analysis determined that an expansion of the mobile fueling program would:

- Reduce carrier time used to fuel vehicles and the amount of fuel consumed when carriers deviate from their routes to obtain fuel.
- Eliminate questionable Voyager card fuel expenditures at selected Postal Service delivery units.
- Mitigate mail delays or interrupted service due to the unavailability of fuel at local fuel vendors in areas susceptible to natural disasters.

A sufficient number of mobile fueling contractors with the capacity to provide fuel needed in an expanded program are available. Also, the contracting process can successfully address environmental regulatory concerns. The Postal Service had not evaluated the potential benefits and obstacles from expanded use.

# **Carriers' Labor Time and Route Deviation Fuel Consumption**

Even though the Postal Service will pay a per gallon surcharge for a contractor to provide mobile fueling, this cost would be more than offset by eliminating carriers' labor time used for fueling vehicles and the amount of fuel carriers use to deviate from their routes to fuel vehicles.

• An analysis of the 1,087 selected units in our review indicated that carriers used over 459,000 hours<sup>8</sup> annually to fuel delivery vehicles. (See Table 2.) Specifically, because of the number of routes/delivery vehicles assigned, 169 of the units reviewed used between 2 and 5 hours daily to fuel vehicles. One unit in Worchester, MA, used almost 30 hours weekly or about 5 hours daily to fuel delivery vehicles. These hours, when added to the retail cost per gallon, effectively increased the cost per gallon for fueling delivery vehicles from \$3.95 per gallon to \$4.51 (or about 56 cents more) per gallon. On the other hand, mobile fuel is purchased in bulk, which averages 15 to 30 cents less than the retail rate.<sup>9</sup> Specifically, in FY 2008, the average bulk rate for fuel was \$3.77 per gallon. With the per gallon surcharge of 38 cents, the effective rate for the Postal Service was \$4.15 per gallon, or about a 36 cents per gallon average savings over purchasing at retail locations. See Appendix D for the fuel price per gallon trend.

<sup>&</sup>lt;sup>8</sup> Based on discussions with Postal Service Headquarters, these hours could be captured through annual route adjustments.

<sup>&</sup>lt;sup>9</sup> Ánalysis shows that as long as the bulk rate averaged 18 cents lower than the retail rate, savings will be consistent at about 36 cents per gallon. Although the variance could conceivably decrease, it has consistently averaged more than 18 cents since FY 2008.

Estimated Retail Fuel Cost					Mobile Fuel Cost				
Area	Number of Motorized Routes	Annual Gallons Used	Annual Hours Used for Fueling	Retail Cost per Gallon	Retail Cost Including Carrier Labor Cost	Bulk Rate Cost per Gallon	Bulk Rate Plus Sur- charge	Cost Per Gallon Savings	Estimated Annual Fuel Savings
Capital Metro	3,057	1,536,387	27,024	\$3.95	\$4.59	\$3.77	\$4.15	\$0.43994	\$675,915
Eastern	6,945	3,970,013	61,394	3.95	4.51	3.77	4.15	0.36263	1,439,648
Great Lakes	9,206	5,135,795	81,381	3.95	4.53	3.77	4.15	0.37651	1,933,675
New York	4,146	2,201,103	36,651	3.95	4.56	3.77	4.15	0.40580	\$893,216
Northeast	5,954	3,124,757	52,633	3.95	4.56	3.77	4.15	0.41282	1,289,974
Pacific	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A
Southeast	939	730,316	8,301	3.95	4.36	3.77	4.15	0.21352	155,938
Southwest	6,042	3,697,834	53,411	3.95	4.48	3.77	4.15	0.32550	1,203,661
Western	10,496	5,749,974	92,785	3.95	4.54	3.77	4.15	0.38709	2,225,729
Rural Routes <sup>10</sup>	5,145	2,522,503	45,482	3.95	4.42	3.77	4.15	0.26167	615,154
Total/Averages <sup>11</sup>	51,930	28,668,682	459,061	3.95	\$4.51	3.77	4.15	\$.36	\$10,432,910

#### Table 2. Estimated Mobile Fuel Cost Savings for City and Rural Routes

Source: DOIS, Area Vehicle Maintenance Program Analysts, Category Management Center, and the OIG

In addition to the cost per gallon savings, analysis revealed that mobile fueling could provide the Postal Service with additional benefits through less fuel consumption. We found that carriers deviated between one and two miles weekly while on their route to obtain fuel for their vehicles. These deviations would not be necessary under a mobile fueling process, since the fueling contractor brings the fuel to the unit. For example, for the 2,895 routes in the Western Area carriers deviated about 184,000 miles for fuel and consumed about 18,000 gallons of fuel. However, under mobile fueling the number of deviated miles would not be necessary. Overall, mobile fueling would eliminate the need for the 10,022 motorized routes to deviate for fuel, thereby reducing fuel consumption by about 70,600 gallons annually,<sup>12</sup> saving approximately \$279,000. (See Table 3.)

<sup>&</sup>lt;sup>10</sup> We calculated rural routes using averages, thus we did not compute the estimated annual fuel savings from the annual gallons used and cost-per-gallon savings.

<sup>&</sup>lt;sup>11</sup> We calculated total/averages using total numbers. Thus, we did not compute the estimated annual fuel savings from the annual gallons used and cost-per-gallon savings.

<sup>&</sup>lt;sup>12</sup> We based gallons of fuel saved on the 10 gallons per mile average for a Long-Life Vehicle (LLV).

Area	Number of Motorized Routes Deviating for Fuel	Average Weekly Deviation per Route	Estimated Annual Mile Deviation	Estimated Annual Gallons used for Deviation	Estimated Retail Cost per Gallon	Estimated Savings
Capital Metro	466	1.29	31,259.28	3,125.93	\$3.95	\$12,347.42
Eastern	1,313	1.54	105,145.04	10,514.50	3.95	41,532.29
Great Lakes	1,683	1.41	123,397.56	12,339.76	3.95	48,742.04
New York	1,272	1.32	87,310.08	8,731.01	3.95	34,487.48
Northeast	480	1.35	33,696.00	3369.60	3.95	13,309.92
Pacific	N/A	N/A	N/A	N/A	N/A	N/A
Southeast	486	.77	19,459.44	1,945.94	3.95	7,686.48
Southwest	1,427	1.64	121,694.56	12,169.46	3.95	48,069.35
Western	2,895	1.22	183,658.80	18,365.88	3.95	72,545.23
Total/Averages	10,022	1.3175	705,620.76	70,562.08	\$3.95	\$278,720.20

#### Table 3. Estimated Fuel Consumption Savings

Source: Area Vehicle Maintenance Program Analysts and Category Management Center

To ensure the Postal Service achieves the benefits of mobile fueling, units must include the cost of carrier labor as well as the cost to deviate from routes for fuel. To illustrate, one district in the Western Area instituted the mobile fueling practice, but discontinued its use. This district did not consider the savings resulting from elimination of carriers' fueling time or the fuel carriers used to deviate from route to obtain fuel. Our analysis indicated the district could have reduced its fuel costs by over \$90,000 annually. Overall, our analysis shows mobile fueling would save the Postal Service \$10,711,630 annually or \$21,423,261 for FYs 2010 and 2011 through reduced fuel cost per gallon and reduced fuel consumption. See Appendix E for details.

#### **Questionable Voyager Card Expenditures**

A mobile fueling practice at the selected units would also reduce unnecessary or questionable Voyager card expenditures. The Postal Service currently uses the Voyager Card to purchase fuel for delivery vehicles. Although Voyager Cards assigned to vehicles are supposed to be used only for regular grade fuel and maintenance, they often show numerous miscellaneous and questioned expenditures such as premium fuel purchases and fuel purchased in excess of tank capacity.<sup>13</sup> Our analysis of a random sample of 146 Postal Service facilities revealed that carriers purchased over 170,907 gallons of premium fuel and acquired over 16,491 gallons of fuel in excess of tank capacity<sup>14</sup> at a cost of over \$99,000 in FY 2008. See Table 4. Since the mobile fuel contractor provides fuel directly to the delivery unit, a Voyager Card would not be necessary for these routes. Based on our projections, we estimate the Postal Service

<sup>&</sup>lt;sup>13</sup> This analysis primarily focused on the Postal Service's LLVs which were designed for regular grade fuel. Although some LLV and Flex Fuel Vehicles have upgraded tank capacity in excess of 12 gallons, the impact on our analysis is minimal since using mobile fueling would eliminate these costs regardless of vehicle type or tank capacity.

<sup>&</sup>lt;sup>14</sup> We did not evaluate these expenditures for impropriety since, in some situations, regular fuel may not have been available and premium fuel may have been necessary. Additionally, although not proper, we found in a previous audit that carriers sometime fueled more than one delivery vehicle with a Voyager card.

can eliminate \$892,457 annually in unrecoverable supported questioned costs, or over \$1.78 million over a 2-year period.

Area	Total Number of Units in Sample	Total Gallons of Premium Fuel Purchased	Total Premium Fuel Cost <sup>15</sup>	Total Gallons of Fuel Purchased in Excess of Tank Capacity	Total Cost of Fuel in Excess Over Tank Capacity	Total Cost of Premium and Excess of Tank Capacity
Capital Metro	13	27,104	\$5,420.85	2,699	\$10,661.17	\$16,082.02
Eastern	15	8,281	1,656.22	2,919	11,528.31	13,184.53
Great Lakes	25	13,609	2,721.90	3,871	15,290.06	18,011.96
New York	11	13,509	2,701.70	460	1,815.14	4,516.84
Northeast	9	7,949	1,589.77	266	1,051.02	2,640.79
Pacific	N/A	N/A	N/A	N/A	N/A	N/A
Southeast	23	2,855	570.95	840	3,316.03	3,886.98
Southwest	26	35,252	7,050.43	1854	7,321.96	14,372.39
Western	24	62,348	12,469.57	3,582	14,149.06	26,618.63
Total	146	170,907	\$34,181.39	16,491	\$65,132.75	\$99,314.14
Projected Savings over 1 year						\$892,457
Projected Savings over 2 years						\$1,784,914

#### Table 4. Questionable Voyager Card Expenditures

Source: Computer Assisted Assessment Techniques Continuous Monitoring System, E-Fleet, and the OIG

## **Natural Disaster Preparedness Impact**

Mobile fueling can also improve the Postal Service's preparedness to continue mail delivery in areas susceptible to natural disasters, such as hurricanes and tornados.<sup>16</sup> Although the Postal Service uses mobile fueling in some locations in emergency situations, it could benefit by expanding this service to other locations susceptible to these condition on a regular basis.<sup>17</sup> For example, in 2008 Hurricane Ike hit Houston, TX, and one emergency mobile fuel supplier could only provide fuel for 1 day and for only three of Houston's largest Postal Service stations. However, in Louisiana, where suppliers provide mobile fuel on a regular basis, there was no impact to mail delivery because fuel was readily available.

## Mobile Fuel Contractor Availability

A sufficient number of mobile fueling contractors with the capacity to provide fuel needed in an expanded program are available. Expanding mobile fueling to the units identified will require contractors to provide about 551,300 gallons of fuel weekly. Even though the Postal Service currently uses seven prequalified mobile fueling contractors located throughout the country, they may not be capable of providing service or the fuel

<sup>&</sup>lt;sup>15</sup> We based the computation on the number of gallons multiplied by 20 cents (difference between average unleaded and premium gasoline for FY 2008).

<sup>&</sup>lt;sup>16</sup> The Postal Šervice uses mobile fueling during emergency situations only in the Southwest Area's Houston and Arkansas Districts because these areas are susceptible to natural disasters, such as hurricanes and tornados.
<sup>17</sup> The Postal Service uses mobile fueling on a regular basis in most of the districts in the Southeast Area and in the

<sup>&</sup>lt;sup>17</sup> The Postal Service uses mobile fueling on a regular basis in most of the districts in the Southeast Area and in the Honolulu, Louisiana, Mid-America (except for Kansas City, KS, because the contract was cancelled) and Nevada Districts.

needed to all 1,087 selected units. Additionally, a single contractor may not be capable of handling all units in a large geographic area. Under these circumstances, the Postal Service could supplement its current list of contractors, as necessary, to service all units.<sup>18</sup> For example, the Postal Service used mobile fueling during the hurricane emergencies in the Houston, TX, area, but had to supplement the assigned contractor with an additional contractor because there was not enough capacity to provide mobile fuel for the entire area.

# **Environmental Concerns**

The Postal Service can successfully address its environmental regulatory concerns through the contracting process. During the audit, Postal Service Headquarters' Environmental Policy and Programs officials became concerned over liability relating to environmental policies and the potential reduction in savings due to federal, state, and local requirements. These are valid concerns and we agree that all environmental requirements and costs are the responsibility of the Postal Service.

The Environmental Protection Agency (EPA) requires refueling facilities needing tanks, hoses, and other "point sources" that would spill or leak into the local water supply to obtain a National Pollutant Discharge Eliminating System (NPDES) permit. The requirements for NPDES<sup>19</sup> permits and Spill Prevention Control and Countermeasure (SPCC) plans along with any sampling and monitoring have to be considered as extra costs and an administrative burden. However, the costs of permitting are often imposed on contractors.

The Postal Service, as owner, would be liable for any environmental violations that may occur as a result of mobile fueling. However, our review of existing mobile fueling locations and discussions with contracting officials indicate that the Postal Service only contracts with fueling contractors after the contractor has obtained the required permits and environmental plans. The contractor's surcharge amount is included in the cost for these permits and plans. Specifically:

- The existing contract requires mobile contractors to obtain the necessary permits to adhere to EPA Clean Water Act and the NPDES and SPCC regulations.
- Although the above action does not relieve the Postal Service from liability, the agency could be indemnified by the mobile fuel suppliers with insurance against spills if it needs to litigate a claim.

<sup>&</sup>lt;sup>18</sup> Based on discussions with headquarters Postal Service Supply Management, review of locations where current prequalified contractors are located, and research of companies that provide mobile fueling, we believe contractors are available with the capacity to provide fuel needed.

<sup>&</sup>lt;sup>19</sup> Per the Code of Federal Regulations Section 122.26(g), if an industry's refueling operations do not expose the environment to oil/fuel (via covered facilities, sealed transfer valves and non-leaking tanks/vehicles), that industry is conditionally exempt from NPDES permit requirements. The term "conditionally exempt" means that if conditions change, the exempt status is instantly revoked; although a site could design its refueling operations to ensure it keeps its exemption.

- To further minimize the risk of spills while on Postal Service property, suppliers could be required to follow some best practices. For example:
  - Placing portable, collapsible spill containment containers or absorbent containment pads with sufficient capacity under the fuel nozzle and fill opening while filling the tank.
  - Using automatic shut-off nozzles.
  - Maintaining and replacing equipment on fueling vehicles, particularly hoses and nozzles, at established intervals to prevent failures.
  - Prohibiting the operator from leaving the vehicle while filling it.

See Appendix C for a detailed list of best practices that can mitigate or reduce environmental concerns.

# APPENDIX C: MOBILE FUELING BEST PRATICES

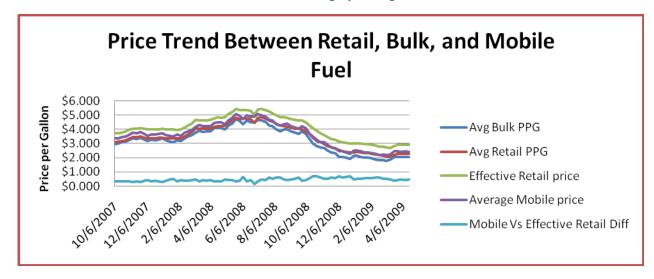
The following is a list of best practices<sup>20</sup> the Postal Service could use to minimize the risk of spills while on Postal Service property:

- Placing portable, collapsible spill containment containers or absorbent containment pads with sufficient capacity under the fuel nozzle and fill opening while filling the tank.
- Wrapping absorbent pads around the nozzle when filling.
- Using automatic shut-off nozzles.
- Replacing automatic shut-off nozzles as recommended by the manufacturer.
- Maintaining and replacing equipment on fueling vehicles, particularly hoses and nozzles, at established intervals to prevent failures.
- Prohibiting the operator from leaving the vehicle while filling it.
- Removing the fill nozzle and ceasing filling when the automatic shut-off engages.
- Prohibiting "topping off."
- Keeping absorbent pads under the nozzle and keeping the nozzle facing upwards while transferring it between the filling vehicle and vehicle being fueled.
- Keeping the act of dragging hoses to a minimum.
- Prohibiting laying filling nozzles on the ground.
- Requiring all fueling vehicles to have a minimum of these spill clean-up materials:
  - Non-water absorbents capable of absorbing 16 gallons of diesel.
  - A storm drain plug kit.
  - A containment boom of a minimum 10 feet in length.
- Requiring all fueling vehicles to have adequate lighting systems at the filling point.

<sup>&</sup>lt;sup>20</sup> We obtained a list of best practices from the OIG's Joint Legal Service Center.

# APPENDIX D. FUEL PRICE TREND

Source: Postal Service Category Management Center



# APPENDIX E: MONETARY IMPACT COST SAVINGS METHODOLOGY

The OIG identified \$23,208,175 in monetary impact related to fuel for city and rural delivery routes using Postal Service-owned vehicles and related Voyager Card purchases. We estimated the Postal Service could save \$21,423,261 in funds put to better use over the next 2 years by expanding the use of mobile fuel to the 1,087 units with 30 or more motorized routes. In addition, we identified \$1,784,914 in unrecoverable supported questioned costs associated with Voyager Card purchases of premium fuel and fuel in excess of tank capacity. This audit included eight areas that could benefit from mobile fueling and limiting the use of Voyager Cards. We estimated the monetary impact by area for 2 years from FYs 2010 through 2011. See Table 5.

Area	Estimated Annual Mobile Fuel Cost Savings for City and Rural Routes	Estimated Fuel Consumption Savings	Annual Monetary Impact	Monetary Impact over 2 Years
Capital Metro	\$751,763	\$12,347.42	\$764,111	\$1,528,221
Eastern	1,475,820	41,532.29	1,517,352	3,034,704
Great Lakes	2,000,507	48,742.04	2,049,249	4,098,498
New York	911,197	34,487.48	945,684	1,891,368
Northeast	1,318,104	13,309.92	1,331,414	2,662,829
Pacific	N/A	N/A		N/A
Southeast	193,994	7,686.48	201,680	403,360
Southwest	1,334,459	48,069.35	1,382,528	2,765,056
Western	2,447,067	72,545.23	2,519,613	5,039,225
Total Funds Put to Better Use (Mobile Fuel Savings)	\$10,432,910	278,720.20	10,711,630	\$21,423,261
Unrecoverable Supported Questioned Costs (Voyager Card) Savings			\$892,457	\$1,784,914
TOTALSAVINGS				\$23,208,175

# Table 5. Total Monetary Impact by Area

# Mobile Fueling Analysis

We used the following data elements to develop the monetary impact for the 1,087 units with 30 or more city and rural routes.

- Number of city motorized routes.
- Number of rural routes with LLVs assigned.
- Number of Postal Service-owned vehicles assigned to units with 30 or more city and rural routes.
- Annual estimate of weekly gallons of fuel used.

- Average time weekly used by carrier to fuel vehicles.<sup>21</sup>
- Average cost per gallon for regular and bulk fuel in FY 2008.<sup>22</sup>
- Average surcharge for mobile fueling contractors.
- City Carrier Overtime Rate and Full Time/Straight Time for Rural Carriers.<sup>23</sup>

# **Fuel Consumption Analysis**

- Number of routes<sup>24</sup> and miles deviated by carriers to fuel their vehicles.
  - Calculated the route deviation in miles that would be saved by identifying the number of times vehicle operators refueled at retail locations.
  - Multiplied the number of fueling weeks in a year by a fueling time of once per week by the number of routes carriers had to deviate to fuel vehicles.
- Calculated the number of gallons that would be saved by dividing the route deviation miles by the average number of miles per gallon for an LLV (i.e., 10 miles).
- Calculated the mileage consumption costs savings by multiplying the annual gallons savings by the average costs per gallon.

## **Questioned Cost Analysis**

- Used an unrestricted random sample of 146 units from the universe of units with 30 or more city/rural routes.
- Included in FY 2008 total Voyager Card purchases the number of retail fuel purchases made, the total amount and cost of premium fuel purchased, the number of gallons used, and the total amount of fuel purchased in excess of tank capacity.
- Calculated the number of gallons by multiplying .20 per gallon which is a conservative number (.25 is difference between the average unleaded regular gasoline and unleaded premium for 2008).

 <sup>&</sup>lt;sup>21</sup> The Postal Service estimates this to be about 30 minutes weekly to account for activities other than purely pumping fuel. We used a more conservative estimate of 10 minutes which did not include associated non-fueling time.
 <sup>22</sup> Analysis used a rate of at least a 15 cents difference between the retail (pump) rate and the bulk rate which has averaged 23 cents less than retail since October 2007.
 <sup>23</sup> Based on discussions with Postal Service Headquarters, cost savings can be captured through annual route

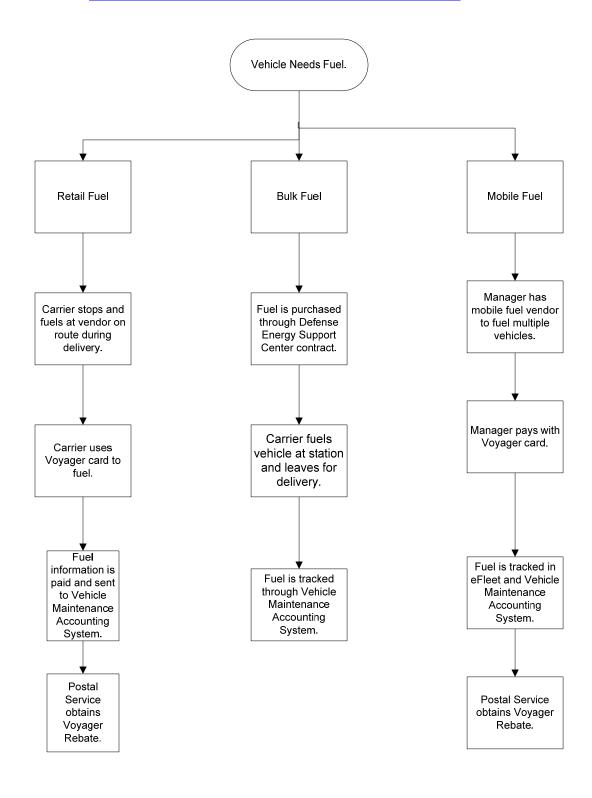
<sup>&</sup>lt;sup>23</sup> Based on discussions with Postal Service Headquarters, cost savings can be captured through annual route adjustments. We based our calculations on the use of the overtime rate for city carriers because we believe savings can also be captured through the reduction of overtime. We used full time/straight labor rate for the rural carriers because we believe savings can also be captured through the reduction of vertime. We used full time/straight labor rate for the rural carriers because we believe savings can also be captured through reduction of time on route.

<sup>&</sup>lt;sup>24</sup> We took the number of routes from a universe of 1,257 units that did not include units in the Pacific Area because it was excluded due to environmental concerns. Also, it did not include cities and districts that prohibit mobile fueling and other specific locations because the installations did not provide data.

- Calculated the total number of gallons used for fuel in excess of tank capacity and subtracted 12 gallons from the total number since this amount is the tank capacity of an LLV.<sup>25</sup>
- Computed the number of gallons over 12 and multiplied it by \$3.95 which is the average price of unleaded regular gasoline for the Postal Service in FY 2008.

<sup>&</sup>lt;sup>25</sup> This analysis primarily focused on Postal Service LLVs which were designed for regular grade fuel and 12 gallon tank capacity. Although some LLV and Flex fuel vehicles have upgraded tank capacity in excess of 12 gallons, the impact on our analysis is minimal since the cost would be eliminated under mobile fueling regardless of vehicle type and tank capacity.

# APPENDIX F: FUEL PURCHASING FLOWCHART



#### APPENDIX G: MANAGEMENT'S COMMENTS

**UNITED STATES POSTAL SERVICE** 

September 22, 2009

LUCINE M. WILLIS DIRECTOR, AUDIT OPERATIONS

SUBJECT: Draft Audit Report – Delivery Vehicle Fuel Management (Report Number DR-AR-09- DRAFT)

Delivery and Post Office Operations and Supply Management have reviewed the draft report and appreciate the opportunity to present our response. Before addressing the recommendation and management's actions, a point of clarification needs to be made prior to the final report. The draft report identifies monetary impacts of \$21,423,261, in funds which could be put to better use in fiscal years (FY) 2010 and 2011. This amount is based on several calculations our offices question. For example, the cost per gallon of gasoline used in the analysis is \$3.95 retail. The FY2008 data used in the report represents an atypical year in terms of fuel costs, not only for the U. S. Postal Service, but for all fuel users worldwide. According to the Transportation Asset Management group, the FY2009 year-to-date national average cost per gallon of gasoline paid by the Postal Service through the Voyager Card program is \$2.25 per gallon.

The associated workhour savings that may result from mobile refueling is another point of concern. The audit states that the hours can be captured through annual route adjustments and reduced overtime. One of the concerns with our experience with mobile refueling is local management's actual ability to capture purported workhour savings. A year-long national route inspection and adjustment period will soon be completed and it may not be cost feasible to further adjust routes identified in the audit at this time.

As mentioned in the report, the Postal Service has used mobile refueling as part of our fuel purchasing strategy for many years, particularly in those geographic regions which have a high risk for fuel availability due to natural disasters. The higher fuel costs are accepted as a necessary business expense to meet our obligation and desire to provide mail service during otherwise difficult recovery periods.

The report contains the following recommendation:

#### Recommendation 1:

Consider as part of the Postal Service's National Fuel Purchasing Strategy expansion of mobile fueling for city and rural delivery units with 30 or more routes using Postal Service owned vehicles, as well as other delivery units as necessary.

#### Response

Postal management will continue to use mobile refueling as part of the National Fuel Purchasing Strategy. We agree to review mobile refueling as a part of the Strategy and expand its use when and where its use is warranted.

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The expansion of mobile fueling will require further site by site consideration in logistical, environmental, safety, and administrative issues, as well as costs and benefits. For example, many delivery units are leased facilities and/or located in residential areas. Lease contractual provisions will need to be reviewed and local ordinances (i.e. fire marshall) and customer impacts (noise related to afterhours operation) will need to be taken into consideration. The estimated completion date for the fuel strategy is June 2010.

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cc: Mr. Forte Ms. Brownell Ms. Oliver Mr. Corey Mr. Harris

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