New York City Department of Investigation
New York City Business Integrity Commission

Investigation into Fraud Involving Fuel Oil Delivery Companies and the Schemes that Stole Millions of Dollars in New York City Taxpayer Funds

MARK G. PETERS, DOI COMMISSIONER
DANIEL D. BROWNELL, BIC COMMISSIONER

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Heating Oil Report

I. EXECUTIVE SUMMARY

The New York City Department of Investigation (DOI), the New York City Business Integrity Commission (BIC), the New York County District Attorney's Office (DANY), and the New York City Police Department Organized Crime Investigative Division (NYPD OCID), have concluded an extensive, two-year investigation focusing on fuel delivery companies that routinely stole heating oil from their customers, which included both City agencies and private consumers, during the past four heating seasons.\(^1\) Based on interviews with employees of the indicted delivery companies, recorded conversations, and other intelligence gathered during this investigation, it is believed that the aggregate theft in the heating oil industry amounts to at least $18 million annually, with an estimated $4 million stolen annually from the City. The City paid at least $117 million for fuel deliveries to City buildings in Fiscal Year 2014.\(^2\)

As part of the investigation, dozens of search warrants were executed at the business locations of the eight indicted heating oil delivery companies, during which computers, phones, and other records were seized, cloned, and analyzed, as well as over $540,000 in cash was seized. Additionally, law enforcement investigators conducted court-authorized telephone intercepts with regard to principals and employees of these same companies. Lastly, a number of the delivery trucks that had been involved in the theft schemes were seized and examined. The investigation culminated in the indictments of eight heating oil trucking companies, and the additional indictments and arrests of approximately 50 of these companies’ principals and fuel truck drivers, for stealing oil.\(^3\)

To date, efforts by state and local governments to implement protective measures to curb these thefts have often been ineffective because the schemes have been primarily carried out by the oil delivery companies themselves, rather than just a few individual rogue drivers. These companies have the resources and financial incentive to invent the means to by-pass or override mandated safeguards meant to protect customers against fraudulent deliveries. This investigation uncovered the various types of fraud schemes used by


\(^{2}\) Agencies pay for fuel individually based on quantities ordered. This number is based on payments made by seventeen agencies under a citywide contract. The New York City Housing Authority (NYCHA) pays up to $28.8 million annually under a separate heating oil contract.

\(^{3}\) As of the release of this report, the fuel companies involved in the indictments are no longer permitted to deliver heating oil to City buildings under the citywide contract.
unethical fuel delivery companies against consumers in New York City, and this report provides policy recommendations that will help curb future thefts in both City and private buildings.

DOI has the unique role of ensuring City agencies operate in a uniform and effective manner to prevent future theft. DOI has therefore issued recommendations (detailed below) to the City agencies that receive heating oil. As of the issuance of this report, 13 City agencies have agreed and begun to implement these recommendations; DOI will continue working with the remaining agencies to assure that the recommendations are implemented citywide.

II. BACKGROUND OF THE HEATING OIL INVESTIGATION

Several recent criminal investigations conducted by DOI, in conjunction with both federal and local prosecutors, revealed that the heating oil trucking industry in the New York City area has been marred by extensive, ongoing fraud that has bilked both public and private-sector consumers of hundreds of millions of dollars. By far, the most common fraudulent scheme in which fuel delivery vendors engage is to intentionally “short” heating oil during deliveries at buildings, i.e., intentionally delivering less fuel than that which the building ordered and for which it paid.5

Several government regulations have been implemented over the years in an attempt to combat shorting.6 However, as the criminal investigations demonstrate and this report illustrates, certain unscrupulous companies in the heating oil delivery industry have managed to sidestep these regulations and continue to steal from their customers, making these schemes a prevalent problem in this industry. DOI and BIC have worked closely with the New York City Department of Consumer Affairs (DCA) and the Department of Citywide Administrative Services (DCAS) during this investigation. DCA has taken the lead in instituting new measures and strengthening its inspection process to eliminate these schemes in the City of New York.

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4 In the 1990s and 2000s, DOI and DANY conducted several investigations in which fuel delivery vendors substituted a lower, cheaper grade of heating oil than what the City had ordered and/or blended waste oil into the heating oil. DOI and DANY also investigated two fuel delivery vendors, Sheffield Fuel Oil Corporation and Capital Fuel Oil, for falsifying records, engaging in collusive bidding, and overcharging the City for fuel deliveries.

5 In July 2007, DOI investigated fuel delivery companies Mystic Tank Lines and T&S Trucking for shorting during deliveries. In United State v. Baldari, et al., federal authorities charged and obtained guilty pleas from the owners of those companies to shorting their customers during fuel deliveries and reselling the stolen oil to other customers in cash-only transactions worth approximately $75 million dollars. At that time, these companies were among the largest heating oil delivery companies in the New York City area.

6 Government regulations have been enacted both to try to curb these thefts and for environmental protection, and include those mandated by the New York State Department of Agriculture and Markets Law, the Environmental Protection Agency (EPA), the New York City Department of Environmental Protection, and the New York City Charter.
III. THE HEATING OIL INDUSTRY IN NEW YORK CITY

Despite recent legislative and environmental efforts to promote the increased use of natural gas over oil as the primary heating fuel source in the City, oil still remains the major method of heating buildings.\(^7\) Refined at various foreign and domestic sites, heating oil is delivered by barges to wholesalers who own bulk storage terminals in the New York area.\(^8\) Heating oil is then distributed throughout the New York region by retailers, who often engage the services of transporters, or trucking companies, to deliver the oil from the wholesaler terminals to residential, commercial, and government consumers. Transporters operate fleets of tanker trucks and charge consumers on a per-gallon basis for the fuel oil being delivered, based on the wholesale price they pay, plus delivery costs and their profit margin. The heating oil delivery industry is highly competitive; therefore, large customers often purchase fuel based on which retailer has the current best price, rather than entering into long-term contracts with specific companies.

Many City agencies receive fuel deliveries, including 19 agencies under a citywide contract managed by DCAS.\(^9\) The contract is awarded to two fuel companies that have three terminals which then subcontract the deliveries out to numerous vendors.

The following City agencies conduct fuel-related inspections to regulate heating oil transport companies delivering to both City and privately-owned buildings:

- The DCAS Quality Assurance (QA) unit is responsible for inspecting and testing fuel at the terminal for compliance with the terms and conditions of the contract(s);
- The New York City Fire Department (FDNY) ensures that fuel delivery trucks have taken fire-hazard safety precautions and are certified for transporting hazardous materials; and
- DCA inspects heating oil delivery trucks annually to confirm, among other things, that the truck’s delivery meter is accurate.\(^{10}\) DCA also handles consumer complaints regarding oil deliveries.

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\(^7\) Approximately 17% of DCAS buildings use natural gas instead of heating oil.

\(^8\) There are several different grades of oil, depending on the level to which the oil has been refined. There are several fuel-grade requirements to which the vendors need to adhere, including those imposed by New York State, the New York City Department of Environmental Protection (DEP), and agreed-upon fuel grade specifications regarding what can be delivered to City buildings.

\(^9\) Other City agencies, including NYCHA, Housing Preservation & Development (HPD), the Health and Hospitals Corporation (HHC), and the New York City Transit Division of the Metropolitan Transportation Authority (NYCT), have separate contracts for heating oil.

\(^{10}\) Companies that have a contract with the city for fuel oil must have their trucks inspected by DCA twice annually. DCA conducted inspections of over 800 trucks owned by 104 heating oil transport companies in 2014; 23 of the companies deliver fuel to City buildings.
However, those inspections cannot prevent or guarantee that neither the fuel nor the fuel truck are tampered with after inspection but prior to delivery. Nor can those inspections prevent the drivers of the delivery trucks from shorting the deliveries at the City buildings. While FDNY and DCA conduct inspections of the fuel trucks making deliveries, the investigation found that companies would revert to using various schemes post-inspection.

IV. HOW CUSTOMERS WERE SHORTED

Heating oil delivery trucks are required to have a number of standard mechanical components for the purpose of protecting consumers. The first is a device commonly referred to as an “air eliminator valve,” which is located at the rear of the truck. Its purpose is to detect when air, rather than liquid (oil), is being pumped through the truck’s meter before flowing into the customer’s tank. The air eliminator valve is connected to the meter, and is designed to shut off the meter’s operation if air is being pumped through the hose. Because the majority of the methods used by fuel oil companies to short customers involve pumping air through the meter in order to falsely register the delivery of oil, the air eliminator valve is essential to ensuring consumers receive the proper amount of oil. (The photo below shows a fuel truck register, which displays and records the number of gallons of oil that pass through the truck’s meter).

Government regulations also mandate that the meters on heating oil trucks automatically issue written receipts at the conclusion of each delivery showing the number of gallons pumped. This function replaced the old system in which the drivers manually wrote out the delivery receipts. The objective is to prevent the drivers from falsely documenting the amounts of oil delivered. This design also stops a driver from making multiple deliveries before issuing a receipt and then charging customers for more oil than what was actually delivered to their building.
All City agencies receive these receipts and submit them to their respective Accounts Payable units for payment. Several city agencies, such as FDNY, require that the employees responsible for receiving fuel deliveries check the receipts taken from before and after the delivery to ensure the correct amount of heating oil was received.

Government regulations also mandate that written records be generated for all heating oil transactions. Every step in the heating oil delivery process – from the barges that transport the oil to the City, to the oil terminals at which it is stored, to the trucking companies that ultimately deliver the oil to the building customers – must be documented and the records maintained for potential inspections by state and City government officials. Therefore, every transfer of oil, and every party involved in the transactions, as well as dates of transactions and amounts of oil transported and delivered, are recorded.

Despite the implementation of these protective measures, the latest series of indictments announced by DANY demonstrate the continuing ability of unscrupulous fuel delivery companies to steal millions of dollars in the aggregate from their customers. During this investigation, of the 58 trucks that were seized by law enforcement, 48 trucks were found to have been altered, enabling the drivers to override the above-described protective devices and permitting the truck meter readings to be falsely inflated. Many of the seized trucks were altered in various ways to either disable or bypass the air eliminator valves. By pumping air through the meters for a portion of the deliveries, drivers were able to inflate the meter readings and short their customers.

For example, investigators discovered that some of the delivery companies provided their drivers with industrial magnets. When attached to the exterior metal housing of the air eliminator valve, the magnet keeps the air eliminator valve in the “off position,” which increases the air pressure within the valve, thereby “tricking” the meter into believing that oil, rather than just air, is passing through it. A number of these magnets were found on the backs of the trucks near the air eliminator valve when the trucks were seized.

One method of determining how much fuel is delivered is by taking before-and-after measurements using a “dip stick.” which involves inserting a stick into the tank and calculating an estimated level of fuel based on the depth. However, even if the person receiving the fuel delivery “sticks the tank” to measure how much fuel was delivered, if air was mixed in with the fuel and permitted to flow into the tank, the bubbles could cause a false reading, making it appear that more fuel was delivered than in actuality. Another scheme used by fuel delivery vendors involves heating the fuel so that the quantity expands prior to delivery and contracts after the fuel cools down, thereby causing the quantity delivered to appear inflated. To combat both of these schemes, measurements can be taken directly
after the delivery as well as 30 minutes later to allow time for the air to settle and the fuel to contract.

In another more elaborate scheme, a second company manipulated the hoses on its trucks that were used to pump the oil from the truck into the customers’ tanks.11 Every fuel truck has at least two hoses of varying diameters used to deliver the fuel. The driver determines which hose to use based on the size of the tank into which the oil is being pumped. A larger hose is used for large tanks and a smaller hose for homes and other small buildings. When seven of this company’s trucks were seized and examined, it was discovered that the hoses on all seven trucks had been altered in such a way that when the driver pulled a concealed lever at the back of the truck, a secretly installed hose diverted the oil back into another compartment in the same truck. Rather than having oil pumped into the building tank, the oil was simply returned to the truck for a portion of the customers’ deliveries. Surveillances conducted during the investigation confirmed that this company was shorting many of its customers in this fashion. (The photo below shows a 3” drop hose on one of the seven fuel trucks seized which diverted fuel from one compartment to another).

![Image](image_url)

As a result of these alterations, whether by manipulating the air eliminator valve or the truck hoses, the meters on these trucks registered a higher number of gallons delivered than what was actually dispensed into the building tank. Fuel delivery vendors are also able to short fuel deliveries even without manipulating the truck by revving the truck engine to force air thru the meter when drawing fuel from an empty compartment. The customer is charged based on the meter reading. For example, in December 2014, a homeless shelter in Manhattan was charged for an alleged delivery of 5002 gallons of heating oil based on the reading on the truck meter; however, the investigation documented that the delivery had been shorted by approximately 540 gallons.

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11 G&D Petroleum Transportation.
After a driver “shorted” a customer, the truck had extra oil remaining in the tanker, which was then resold to other customers, both other fuel delivery companies as well as private consumers. This stolen oil was sold at prices below the market price, generally in cash transactions, to net pure profit, as an unwitting customer had already paid for it. The investigation documented fuel delivery vendors engaging in this resale to private consumers.

Detecting and investigating oil shorting schemes is quite difficult. Truck drivers are able to steal from their customers even while building superintendents supervise the deliveries. In one case, investigators recorded a fuel truck driver laughing about how he had instructed a building manager to pull the lever to “initiate” the fuel delivery, when in reality the lever manipulated the air eliminator valve, essentially causing the building manager to short his own fuel delivery.

Intercepted telephone conversations, recorded during the course of this investigation, revealed that the victims of this scheme were numerous and diverse, such as churches and hospitals, as well as City agencies, including the Department of Education (DOE), Department of Environmental Protection (DEP), the Department of Homeless Services (DHS) homeless shelters, the Department of Sanitation (DSNY), the Department of Transportation (DOT), the Human Resources Administration (HRA), FDNY, NYPD, the New York City Housing Authority (NYCHA) housing facilities, Parks, as well as other City agencies, and DCAS-managed buildings, including where DANY is located. Shortages were also documented at thousands of privately-owned buildings in the City.

Previous attempts to combat shorting have largely focused on the delivery trucks. For example, as a result of previous fuel investigations, DOI recommended that DCAS amend the citywide fuel contract to require all trucks delivering heating oil to City buildings, regardless of where those trucks are stored, to be inspected by DCA twice a year in order to catch and deter vendors from manipulating the truck meters. But as described above, these efforts alone are insufficient.

V. PREVENTING THESE SCHEMES

Despite the large amounts of stolen oil and the many consumer victims that were reported in this case, these wholesale thefts of heating oil can be stopped. The information gleaned from this investigation, as well as preventative methods discussed during the newly-created Citywide Heating Oil Task Force, offer effective solutions to protect both City and private-sector customers.

12 During this investigation, retail prices of heating oil averaged $3 to $3.50/gallon.
The Citywide Heating Oil Task Force is a DOI initiative created specifically to help combat these thefts, comprised of officials from more than 20 City agencies, along with the New York City Transit Division of the Metropolitan Transportation Authority (NYCT) and the Health and Hospitals Corporation (HHC). These officials oversee and monitor both the deliveries and payment of heating oil for their agencies, and many of them have decades of experience in their respective professions, which range from building managers and stationary engineers to auditors and accountants. This group has begun meeting and sharing information on effective methods for preventing overcharges and on the remaining challenges regarding oversight of their agency’s fuel deliveries. The Task Force has identified many valuable practices and is developing standard uniform protocols to ensure that City agencies minimize their risk of being shorted in the future. These protocols, comprised of standard procedures for ordering, receiving delivery, and payment of heating oil, will be equally valuable to private-sector consumers, including building management associations and co-op and condominium associations. The Task Force will continue to share and reform best practices for fuel deliveries at City buildings. The Task Force will also share patterns of shorting by delivery company trucks and other derogatory fuel-related information they discover, so that the City can refuse future deliveries from that particular company’s trucks or refuse to contract with those companies in the future. DCA will provide the Task Force with regular fuel truck inspection reports to enable City agencies to identify patterns of delivery shortages by both subcontractor and delivery truck. Agencies will also communicate citywide when a discernible pattern is identified so the City can take appropriate action.

Also, DOI, BIC and its law enforcement partners have met with manufacturers of truck meters, building tank gauges, and other fuel-related monitoring devices, to determine how advances in this technology can further protect consumers. Most importantly, practical measures can be implemented at both the governmental and private consumer levels to severely limit this kind of fraud.

While government oversight will continue to mandate that the delivery trucks have certain mechanical devices designed to ensure the reliability of the meter readings, consumers can also protect themselves by focusing on their building’s tanks. As more fully described below, if consumers install accurate tank gauges (which are readily available from several companies) and take other precautions, they can prevent shorting. This is because, as the criminal investigations have demonstrated, while the fuel delivery companies can disable the required devices on their trucks, they have little, if any, ability to undermine consumers’ efforts to control and accurately measure the amount of oil that actually goes into their buildings’ tanks. These measures are effective only if actually implemented and monitored.

During the course of the recent investigation, DOI and BIC learned that the companies engaging in the theft schemes avoided shorting at certain government agency buildings,
particularly those managed by NYCT, because those facilities had implemented measures that are designed to prevent and reveal thefts. Specifically, conversations recorded during this investigation captured subjects talking about staying away from NYCT facilities because they diligently oversee fuel deliveries. Following a previous DOI investigation regarding fuel shortages at FDNY, several policy and procedure changes were recommended to the agency and implemented in the summer of 2014; recorded conversations from this investigation also showed that the subjects reduced shortages at FDNY locations after the changes were implemented, indicating that they serve as a direct deterrent to fraudulent fuel deliveries.

VI. POLICY PROCEDURES AND RECOMMENDATIONS

As a result of this investigation, DOI has made the following Policy and Procedure Recommendations to effectively thwart fuel delivery thefts, many of which have already been implemented by City agencies through ongoing communication with the Citywide Heating Oil Task Force:

1. Maintain a centralized database that identifies all operational fuel tanks and other pertinent information (size, location, grade, type of gauge);

2. Proactively monitor the daily fuel usage at each location to identify any irregularities. This makes it easy to detect whether there are any leaks or if any fuel is being siphoned out of the tank, and also helps to predict when the building will need to order more fuel;

3. Schedule all fuel deliveries with the building’s management so that a knowledgeable person from the building (Building Representative) is present and knows the standard procedures for fuel deliveries. If no one from the building is present during the delivery, there is little possibility of preventing shorting, even if the building’s tank is equipped with a reliable gauge;

4. Fuel deliveries should be scheduled centrally by agency, not through the specific location, and automatically when quantity of fuel is below a pre-determined percentage capacity;

5. Train Building Representatives to be aware of the ways to combat potential fraud during fuel deliveries. As a result of this investigation, DCAS has trained the facility operators at each of its locations on the delivery protocols to ensure compliance and uniformity across the agency;

6. Equip each tank at each building with a reliable tank gauge that is maintained and serviced regularly. The Task Force members have been sharing their knowledge of the best gauges on the market. DCA will recommend that businesses and consumers
alike use an oil tank gauge to monitor how much oil they’re receiving, and to regularly service and recalibrate the gauge to ensure it is accurate and functioning properly;

7. Establish written protocols for Building Representatives to follow during fuel deliveries. DOI will be recommending revised protocols based on the on-going activities of the Task Force. The NYCT, as well as some City agencies such as DCAS, FDNY, the Department of Parks and Recreation (DPR), DSNY, NYCHA, and the Department of Education, already have written protocols for their building managers to follow during fuel deliveries. DCAS contract(s) include clauses for liquidated damage against the vendor for failure to adhere to the terms and conditions of the contract. Examples where liquidated damages may be assessed are for missed deliveries, fuel shortages, fuel contamination and oil spills;

8. Immediately prior to delivery, require Building Representatives to take an initial reading from the tank gauge. The gauge will then issue a written ticket documenting the level of the tank just prior to the delivery. Upon arrival of the truck, require the Building Representative to examine the truck meter for any irregularities and to ensure it contains a clean, unused ticket. This prevents a driver from falsely inflating the amount of oil actually delivered by using a meter ticket from a prior, larger delivery – a somewhat common scam that informants recounted for law enforcement officials during the recent criminal investigation;

9. During the delivery, require the Building Representative to position themselves at the back of the truck and continuously observe the delivery and the appearance of any “red flags.” The main observations to make are: (i) whether the flow of the oil, as indicated by the speed with which the truck meter reading increases, seems to be steady; and (ii) whether the truck hose through which the oil is being pumped “jumps” at all during the delivery, which is an indication that air rather than oil is passing through. If the oil flow is erratic or the hose jumps, the Building Representative should question the driver and have the truck inspected if necessary;13

13 DCA has provided a list of “red flags” that the Building Representative should look for, including making sure that the truck has an unbroken DCA seal attached, which means that the truck has passed its required annual DCA inspection and that the meter has not been tampered with. Many of the delivery trucks seized as part of the recent investigation were found by the DCA inspector who examined them to have tampered seals on their fuel truck meters, indicating that the meters had possibly been altered since their last inspection. DCA will also inform consumers of useful steps to avoid future thefts. “Red flags” include: (i) confirming the fuel delivery vendor has a valid DCA inspection certificate; (ii) checking the security seal on the meter to ensure it has not been tampered with; (iii) looking at the start-stop times on the delivery ticket; (iv) ensuring a clean, unused delivery ticket was inserted into the meter before delivery and that same ticket is provided by the business after the delivery has been completed; and (v) confirming that the rate of flow from the fuel tank during the inspection matches the rate of flow at the delivery location (for example, if DCA measured 60 gallons/minute and the rate at the location is 120 gallons/minute, it can indicate that there is waste oil mixed in with the product).
10. Once the delivery is complete, require the Building Representative to obtain the meter ticket directly from the meter on the fuel truck (to ensure it corresponds to that delivery) and then take an “after delivery” reading from the tank gauge while the driver is still present to confirm that the difference between the two readings equates to the amount of fuel on the vendor delivery ticket.\textsuperscript{14}

11. Provide all delivery information to a centralized Accounts Payable unit, which should document every delivery gallon and dollar amount, including discrepancies between the data reported by the tank gauge and the vendor’s meter so that the agency will only pay the vendor for the exact amount of heating oil received. Discrepancies should be provided to the Accounts Payable units of city agencies so that the vendors will be held fiscally responsible, and can issue a “stop payment” to the delivery vendor until the amount of oil delivered has been confirmed. City agencies can also hold a percentage of the payment as “retainage” until a later date so that the City has ample time to discover discrepancies and fraud;

12. Establish a centralized accounts payable unit within each City agency whose role is to reconcile all the documents generated during the fuel delivery process and all invoices provided by the delivery companies. This will enable the agency to track every fuel delivery, to identify any discrepancies and to notify DOI of any patterns where the City is being shorted;\textsuperscript{15} and

13. Require the Building Representative to obtain fuel samples from the trucks regularly but randomly. The sample would then be sent to an independent lab they have under contract to determine if it contains any of the usual components of used oil. If the test results show that the sample contains any impurities, the agency can hold the vendor fiscally responsible and refer to DOI for a potential criminal investigation.\textsuperscript{16} This

\textsuperscript{14} If the building gauge readings before-and-after the delivery indicate that only 500 gallons were added to the tank, and the truck meter receipt lists an amount of 700 gallons, the Building Representative can challenge the driver on the spot; drivers would be hard pressed to short under these constraints.

\textsuperscript{15} The agency could then respond to any discrepancies by deducting them from the monthly payments, and should also notify the vendor of which delivery trucks have patterns of shortages, and that the agency will refuse future deliveries from those trucks. The MTA protocols require that the written gauge readings along with the corresponding truck meter receipts be provided to a central auditing unit within the MTA for a more accurate reconciliation, so that any discrepancies can be quickly addressed. FDNY also requires the meter receipts to be provided along with the delivery ticket and vendor invoice prior to any payments being made. Both the MTA and FDNY have found that since these procedures have been implemented, minimal discrepancies between tank gauge readings and oil company receipts indicate that there is less shorting occurring at these agencies.

\textsuperscript{16} Aware of the fraud regarding blending waste oil, NYCT has measures in place to check the quality of the heating oil being delivered to its facilities. DCAS QA inspectors take fuel samples as trucks leave the terminals en route to deliver heating oil at City buildings; however, there is no way to ensure that waste oil is not blended in after the inspection.
recommendation is in response to another fairly common fraud engaged in by heating oil delivery companies, which is to adulterate their oil by blending in excessive amounts of waste oil (often used motor oil) with the regular heating oil, and then delivering the “blended” oil to unsuspecting consumers, which can severely damage the burner in a building’s boiler. Unrefurbished waste oil is far less expensive than heating oil so, depending on the amount blended, the delivery companies can save substantial amounts of money.17

VII. CONCLUSION

Recent criminal investigations, including today’s announcement of 53 indictments (44 individuals and 9 fuel delivery companies), have shown that building owners who are unaware and inattentive regarding their heating oil deliveries fall victim to significant shorting. DOI and BIC believe that implementing the aforementioned recommendations and making minor changes to the process of ordering, delivery, and payment of heating oil will have a major deterrent effect on fraudulent fuel deliveries. The key to monitoring citywide fuel deliveries is to include a human element into the process to ensure that fuel delivery vendors are held accountable and fiscally responsible. Installing and using effective tank gauges, coupled with having responsible building staff on hand for deliveries, can significantly reduce the amount of shortages, thereby saving significant amounts of money per building. DOI and DCA, utilizing the knowledge and experience of the members of the Task Force, will continue to keep both City and private-sector oil consumers apprised of ways to combat these frauds. These types of schemes are discernible and preventable.

17 There are government-approved methods of refurbishing used motor oil, such that a small percentage, usually 2-3% of the overall amount of oil, is permitted under certain contracts. The refurbishing process generally entails removing any residual water and metal particles contained in the used motor oil.