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REPORT OF INSPECTOR GENERAL'S FINDINGS

WASTE AND FALSIFICATION IN THE BUREAU OF SANITATION

October 7, 2008

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INTRODUCTION

Between May and September 2008, the Inspector General's Office ("IGO") conducted an investigation of the City's garbage truck crews in ten wards to determine whether the crews were actually working while they were on the clock. The IGO decided to conduct such an extensive investigation because prior IGO investigations into similar allegations appeared to show that there was a widespread problem in the Bureau of Sanitation regarding the waste of taxpayer funds.

Starting in May 2008, a team of IGO investigators spent one week in each of the ten wards conducting surveillances from the beginning to the end of the crews' shifts. The ten wards were spread out among all parts of the City and among the five Divisions in the Bureau of Sanitation.¹ Overall, the investigators observed 222 workers – 77 garbage truck drivers and 145 laborers – to determine if they were working a full day.

The investigators found a remarkably consistent pattern throughout all the wards. Although the crews were well paid to work eight full hours a day, on average they only worked *less than six hours a day*. Thus, for more than two hours each day, the City's garbage truck crews were paid but did nothing.

The amount of time the crews did not work while on the clock ranged from a high of 2 hours and 28 minutes in the worst ward, to 1 hour and 38 minutes in the best ward. The average across all ten wards was 2 hours and 3 minutes of time not working. This amounts to 26% of the work day.

For these ten wards alone, this level of waste and falsification computes to an annual loss of \$3.7 million in wages being paid to employees who are not working. And assuming that the other forty wards are no better and no worse than these ten wards, this level of waste and falsification would compute to an annual loss to the City of \$14.3 million in wages.

This loss figure merely counts the value of the wages paid for no work. It does not include other associated costs such as benefits, and the cost of maintaining and fueling the garbage trucks. When these costs are added in, the estimated annual total loss to the City is \$20.9 million.

The IGO classified these periods of non-work in two ways – if the employee was at his work location but was doing no work, it was classified as "waste"; if the employee was away from work (at home, at a restaurant, etc.) while he was on the clock and supposed to be working, it

¹ This report does not specify the identity of these ten wards. That information is being provided separately to the Mayor, the aldermen for these ten wards, and the Streets and Sanitation Commissioner.

was classified as "falsification". The amount of waste plus the amount of falsification equals the total amount of time the employees spent not working.

The average level of "waste" across all ten wards was 1 hour and 27 minutes per day, ranging from 1 hour and 49 minutes in the worst ward to 1 hour and 7 minutes in the best ward. Thus, in the worst ward, the *average* employee was at the worksite and getting paid but was doing no work for nearly two hours per day.

The average level of "falsification" across all ten wards was 36 minutes per day. The amount of falsification varied from a high of 57 minutes per day in the worst ward to a low of 18 minutes in the best ward. Thus, in the worst ward, the *average* employee was getting paid but was absent from work for nearly one hour per day.

The IGO also calculated these figures separately for the garbage truck drivers and the laborers who work on the back of the truck. While both sets of employees spent considerable time not working, the laborers had significantly higher levels of waste and falsification than the truck drivers.

Specifically, laborers averaged 2 hours and 22 minutes of non-work per day (1 hour and 36 minutes of waste and 46 minutes of falsification). In total, therefore, the average laborer was paid 8 hours of wages for 5 hours and 38 minutes of work. As to the truck drivers, they averaged 1 hour and 31 minutes of non-work per day (1 hour and 11 minutes of waste and 20 minutes of falsification), meaning they worked 6 hours and 29 minutes per day for 8 hours of wages.

In two wards, laborers averaged over 1 hour of falsification per day. In five wards, laborers averaged over 1½ hours of waste per day. Even in the best-performing ward, laborers averaged over 1 hour and 19 minutes of waste per day (which does not include falsification). Thus, even in the best-performing ward, laborers were being paid for 8 hours of work but were only working 6½ hours at most.

The investigators' observations across all ten wards make it clear that the principal cause of the problem is the extremely poor supervision by Bureau of Sanitation supervisors. In each ward, the Ward Superintendent and his assistant, the Refuse Collection Coordinator ("RCC"), are in charge of supervising the work of the garbage truck drivers and laborers. Yet, in each of the ten wards, waste and falsification were rampant. Any supervisor even mildly interested in ensuring that the truck crews in this ward were working full-time jobs would have noticed that employees were often absent for long periods of time while swiped in, or were hanging around the ward yards or truck checkpoints without working – sometimes sleeping in their cars, sometimes loitering, sometimes taking long, leisurely lunches.

By failing to properly supervise the garbage truck crews, these supervisors enabled this extensive waste and falsification of time. In short, the supervisory performance of the Ward Superintendents and the RCCs in these ten wards fell far short of the City's expectations for its managers.

The Ward Superintendents are supervised by five Division Superintendents, who in turn are supervised by a City-wide General Superintendent. It is clear that either they were doing a poor job of supervising the Ward Superintendents, or the Department's system for ensuring that its employees are actually working is a poor one – or both.

After the field work was completed in this investigation, the IGO spoke to Bureau of Sanitation management about the rules and expectations for work by garbage truck crews. BOS management confirmed that to be working, the laborers needed to be either (i) on the truck picking up trash, or (ii) in the alleys or streets sweeping, picking up trash, or hanging or taking down street-sweeping signs when the truck was driving to and from the dump.

Nevertheless, during the entire ten weeks of observations, the investigators did not see a single laborer doing a full day's work. Even the best-performing of the 145 laborers observed during the investigation was idle and doing no work for more than 30 minutes while on the clock.

Choosing a solution to this problem depends on a variety of issues, including budgetary considerations.

On the one hand, if the number of garbage crew workers is to remain constant, then the level of garbage and cleaning service in these wards should dramatically improve if the workers actually worked for all eight hours they were paid. Ensuring that all garbage crews actually work a full day would require a dramatically improved system of supervision and enforcement at the BOS.

On the other hand, if the level of garbage and cleaning service that the crews have been providing in these wards by working only six hours a day is acceptable, then they could be paid only six hours of wages, rather than eight, without any change in service. Across all 50 wards, this would save approximately \$14.3 million per year in wages alone. Obviously, it is not feasible to keep a workforce of full-time employees but only pay them for six hours of work per day. The alternative is to decrease the number of employees yet require them to work a full eight-hour day. In general, if a certain number of employees are completing certain tasks working six hours a day, then 25% fewer employees working eight hours a day should be able to complete the same tasks. And if the number of employees working on truck crews was decreased by 25%, this may allow the Bureau of Sanitation to decrease its equipment costs as well.

Reducing the workforce will not in and of itself solve the problem identified in this investigation. One change to City garbage pickup practices that has been discussed for some time is changing from two laborers per truck to one laborer per truck. While most of the trucks observed by the IGO in this investigation were two-laborer trucks, the IGO also observed some one-laborer trucks. The waste and falsification problem appeared equally bad regardless of how many laborers were on the truck. If the City reduces its garbage-truck work force but does not take strong, sufficient steps to ensure that its workers are working a full day, then the waste and falsification problem will simply continue on a somewhat smaller scale.

Everyone understands that working on a garbage truck can be dirty, smelly work. But the City employees who work on these trucks are very well compensated. The typical truck driver makes

wages equivalent to \$63,856 per year (\$30.70 per hour), and the typical laborer makes wages equivalent to \$60,154 per year (\$28.92 per hour). This is *before* any overtime payments. All of them receive between 13 and 25 paid vacation days per year depending on their length of service. They get excellent pension benefits and full health care insurance for themselves and their families. Especially in times like these when jobs are scarce, it is important to point out that the City taxpayers are paying the garbage crews who work for them very well.

Taxpayers have the right to expect that these employees will perform a full day's work for a full day's pay. The taxpayers also have the right to expect that Bureau of Sanitation management will do its job to ensure that taxpayer funds are not being paid to workers to do nothing for large portions of the work day.

The findings of this investigation show that the problem of garbage truck crews wasting and falsifying time is a systemic, pervasive problem that extends to wards in all parts of the City. Addressing this problem will require systemic solutions from Streets and Sanitation management. BOS's system of supervision and its system of enforcing a full work day need to be overhauled. Streets and Sanitation must consider whether the people it has in place as managers and supervisors are appropriate for these roles. And it should consider whether those individuals who engaged in extensive falsification of time – along with the supervisors who allowed it to occur through their complete lack of supervision – should be disciplined. On this last point, the IGO will be sending to Streets and Sanitation in the near future detailed records regarding its waste and falsification observations along with any disciplinary recommendations.

Part I of this report provides background information regarding the Bureau of Sanitation and its garbage collection operation. Part II describes our investigation and its findings regarding waste and falsification. Part III details our estimates of what this waste and falsification are costing the City.

I. BACKGROUND REGARDING THE BUREAU OF SANITATION AND GARBAGE COLLECTION

A. Organization and Budget

The Department of Streets and Sanitation is divided into six Bureaus: (i) Forestry, (ii) Street Operations, (iii) Electricity, (iv) Traffic Services, (v) Rodent Control, and (vi) Sanitation ("BOS"). Each Bureau is managed by a Deputy Commissioner.

BOS provides refuse collection, recycling, street sweeping, and equipment support services. In 2008, its total budget was \$161.0 million, of which approximately \$72.0 million was allocated to pay its garbage truck crews.

BOS is divided geographically into five Divisions encompassing 49 of the City's 50 wards. ² Each Division is managed by a Superintendent and is comprised of either nine or ten wards.

² The 42nd Ward has one garbage truck which is operated out of the Bureau of Street Operations. For purposes of this report, we discuss refuse collection operations across all 50 wards.

Each Division runs east-west across approximately one-fifth of the City. Division One is far north; Division Two is north-central; Division Three is central; Division Four is south-central; and Division Five is far south. (See the Division/Ward map attached as Exhibit 1.)

B. Supervisors at the Ward Level

The BOS supervisor in each ward is the Ward Superintendent. He is assisted by an RCC. The responsibilities of these positions are detailed in the Streets and Sanitation's "Ward Superintendent Reference Manual". Ward Superintendents have the following responsibilities regarding refuse collection: (i) ensuring that all daily assignments, including "between load" hand cleaning of alley assignments, have been issued and that Laborers proceed to the work sites in a timely manner; (ii) checking on the refuse trucks and crews at least twice daily; (iii) ensuring that the refuse crews start in the alleys in a timely manner and return to the alleys from lunch on time; (iv) ensuring that the refuse crews are working and that all refuse collection policies are followed; and (v) monitoring their refuse crews to ensure that they stay in the alleys to maximize "loading time."

Regarding their non-refuse collection responsibilities, the Manual provides that Ward Superintendents must administer and maintain street sweeping schedules, ensure that daily street sweeping postings are hung and removed, and that the street sweeping crews are supervised. In addition, Ward Superintendents are expected to survey their wards and follow up on 311 complaints and citizen requests for services.

The Manual says that RCCs are to supervise refuse crews. RCCs should visit each of their garbage truck crews at least twice daily to ensure that work is being completed. In addition, RCCs are responsible to supervise "between load" activity which includes hand cleaning of alleys. RCCs should add additional work to the "Daily Truck Sheets" if crews "clean the sheet" and there is more loading time left. RCCs are also responsible for "inspecting" 311 complaints involving sanitation code violations within their ward.

C. Truck Drivers and Laborers

During the period of this investigation, BOS used approximately 351 garbage trucks to collect garbage on daily routes. Between 2003 and 2007, the City purchased approximately 97 new garbage trucks ranging in cost from \$143,982 to \$175, 126.³ There were approximately 713 Sanitation Laborers assigned to these trucks. The typical Motor Truck Driver ("MTD") is paid \$30.70 per hour, 4 and the typical Sanitation Laborer is paid \$28.92/hour.⁵

³ This information was obtained from the City's Financial Management Purchasing System ("FMPS").

⁴ As of July 2008, the typical Motor Truck Driver was paid \$30.70 per hour. This was an increase from the wage rate of \$29.95 that was paid to the typical MTD in the first half of 2008. MTDs who are in their first two years of service ("new hire" MTDs) are paid \$27.63 the second year and \$24.56 the first year.

⁵ As of January 2008, the typical Sanitation Laborer is paid \$28.92 an hour. Laborers who are the "sole laborer" on a truck are paid \$31.38 per hour. Laborers who are in their first three years of service

A typical garbage truck crew consists of an MTD and two Laborers. The normal work week for a crew is five consecutive full days. A full day is an 8 ½-hour shift, which is supposed to consist of 8 hours of paid work and ½ hour of unpaid lunch.⁶ During the winter months, their work hours are 7:00 a.m. to 3:30 p.m. During the summer months, their hours are 6:00 a.m. to 2:30 p.m.

In some wards, the Laborers meet the MTD and the garbage truck at the ward yard each morning and the Laborers leave their personal vehicles at the ward yard. This report refers to these as "ward yard" wards (or "yard" wards). In other wards, Laborers meet the MTD and the truck at specific street locations in the ward called "checkpoints" to start their work. In these "checkpoint" wards, the Laborers have to swipe in and out at the ward yard at the beginning (and end) of their shifts, and then drive their personal vehicles to the checkpoint location. They leave their vehicles on the street and are dropped off there by the trucks for their lunch break.

In all wards, MTDs report to work (and swipe in) at a specific "parking facility" within their Division where the garbage trucks are located. Each Division has one or more of these parking facilities. Once the MTDs pick up their assigned garbage trucks, they either drive the trucks to the ward yard and pick up the Laborers, or drive the trucks to the first checkpoint assignment of the morning to meet the Laborers. The MTDs must also return the trucks to the parking facility at the end of the day and swipe out of work from there.

D. BOS policies and procedures

BOS has written policies and procedures that explain what MTDs and Laborers are supposed to do at work. BOS management confirmed to the IGO that these policies and procedures govern the conduct of MTDs and Laborers who are expected to follow them.

After finishing the surveillances in this investigation, IGO investigators spoke to BOS management about what constitutes work for MTDs and Laborers. In general, BOS management said that once MTDs swipe in, they are supposed to drive their trucks to the locations where they meet their Laborers, and then start picking up garbage in the alleys. When the truck's load is full, the MTD is supposed to go to the dump alone. The Laborers are supposed to work until the truck returns by sweeping or hand-cleaning streets, alleys, or vacant lots, or as otherwise directed by their Ward Superintendent. When the truck is finished picking up garbage for the day, the MTD drops off the Laborers at the ward yard or the checkpoint, and then either goes to the dump

("break-in" laborers) are paid \$26.03 the third year, \$23.14 the second year, and \$20.24 the first year. All of these wages are scheduled to rise in January 2009, with the typical Laborer's wage rising to \$29.79.

⁶ See Collective Bargaining Agreement between the City and Local 1001 of the Laborers International Union, Section 9.2.1 and 9.2.3, pgs 59-60 (ratified December 12, 2007); Streets and Sanitation Ward Superintendent Reference Manual – *Procedures for Motor Truck Drivers* – tab 8, (Summer 2007). The BOS Deputy Commissioner confirmed for the IGO that the MTDs, like the Laborers, receive ½ hour of unpaid lunch time, which is separate from the eight-hour period of paid work.

or returns the truck to the parking facility. If significant time still remains before the end of the shift, the Laborers are supposed to go back to sweeping or hand-cleaning until the end of their shift.

BOS management confirmed that Laborers who remain in the ward yard while on the clock are not working, and that MTDs who remain in the ward yard or the parking facility while on the clock are not working unless they had to return to the parking facility for a truck repair.

1. Written Policies Regarding Laborers⁸

At the beginning of the work day, Laborers are to report to the work site (after they swipe in) and begin work. If the garbage truck has not arrived, Laborers are to prepare the alley which includes: (i) sweeping the alley, (ii) placing any refuse on the ground into garbage carts, and (iii) pulling the garbage carts to the alley line and sweeping behind the carts. Laborers are not to sit in their cars waiting for the garbage truck to arrive.

At the end of the first load (usually mid-morning), all garbage trucks are to proceed to their dump locations. At no time are the Laborers to accompany the trucks to the dump location. Prior to lunch, Laborers are to be given assignments by their Ward Superintendents such as: (i) hanging signs, (ii) taking signs down, and/or (iii) hand cleaning an area. These assignments are to be recorded on the Daily Truck Reports.

After taking a one-half hour lunch break, Laborers are expected to proceed to the work area and begin working. If the truck has not arrived there, the Laborers are to prepare the alley which includes: (i) sweeping the alley, (ii) placing all refuse on the ground into carts, and (iii) pulling the carts to the alley line and sweeping behind the carts. Laborers are not to sit in their cars waiting for the truck's arrival.

In the afternoon, if a refuse crew "cleans the sheet" (meaning that it has completed collecting the refuse from its assigned alleys for that day) and there is still more loading time available, the policy says that crews are expected to continue working into the next "unit" (alley) and the Ward Superintendent should be contacted. Laborers are expected to stay in the alleys working until the time designated by the Ward Superintendents.

⁷ According to Streets and Sanitation's website, BOS created a "night shuttle" program in which the trucks in some wards do not go to the dump at the end of their shifts. Instead, the second load is dumped by night drivers. The website says this program was instituted because "previously, garbage trucks needed to leave their alleys in time to dump their loads by the end of each eight-hour shift. With the night shuttle program, truck crews now skip their last dumping and remain longer on their routes. . . . This results in greater productivity from the Laborers on each truck who no longer are idle while their [trucks] are off to dump the loads."

⁸ See Streets and Sanitation Ward Superintendent Reference Manual – Laborer Responsibilities, Restrictions and Other Guidelines – tab 8, (Summer 2007).

Other than the lunch break, all breaks while working in an alley including "bathroom breaks" require the permission of the Ward Superintendent. All breaks must be recorded on the Daily Truck Report with exact times.

2. Written Policies Regarding MTDs

At 6:00 a.m., unless otherwise instructed, MTDs should go to their assigned garbage trucks and completely inspect the fuel, hydraulic oil, tires and other equipment. Any problems should be immediately reported.

MTDs should go directly to their first assignment/ward yard and get the Daily Refuse Report showing the work assignment for the day. After receiving the daily assignment, MTDs should go directly to the assignment.

After the completion of the first load, the Laborers should be dropped off at the instructed location. MTDs should go directly to the dump or to lunch as directed. Lunch is one-half hour. MTDs should not exceed the half hour given. MTDs should then return to the "units" [alleys] for a second load.

II. THE INVESTIGATION AND ITS FINDINGS

A. Initiation and Methodology

Over the years, the IGO has received specific complaints about garbage truck crews falsifying and wasting time while on duty. The IGO investigated many of the complaints but lacked the resources to investigate them all. During these investigations and other unrelated investigations involving alleged misconduct by BOS supervisors and employees, IGO investigators consistently observed garbage truck crews not working for substantial periods of time. Based on the observations as well as the similarity and frequency of the complaints that continued to be made to our office, it appeared that there was a broader problem within BOS involving its garbage truck crews.

In early 2008, the IGO decided to test these *ad hoc* observations with more systematic observations. First, in April and early May 2008, the IGO conducted simultaneous surveillances of multiple BOS garbage truck crews in two different wards in different parts of the City to determine if a larger investigation was warranted. IGO investigators observed that the garbage truck crews, especially the Laborers, were engaged in significant falsification and waste.

In selecting the scope of the investigation, we concluded that surveillance in just a few wards would be an insufficient sample size to determine whether there was a City-wide problem. On the other hand, attempting to investigate all 50 wards would effectively prevent the office from doing any other work for a substantial period of time. In deciding the amount of surveillances to conduct in each ward, we concluded that it was important to observe the actions of the garbage crews in a ward for an entire week since the City picks up all residential garbage once a week.

Given the IGO's limited resources, we decided that the proper scope of this investigation was ten wards. This required ten full weeks of surveillances from one team of IGO investigators. And in light of our other investigative responsibilities, it was not realistic to spend more than ten weeks on this project.

In selecting the ten specific wards, we concluded that the wards needed to be spread out throughout the City to determine whether the problem was limited to certain Divisions or geographical areas in the City. We selected two wards in each of the five Divisions to ensure geographical diversity and to ensure that any City-wide conclusions were valid. In addition, we chose a mix of "checkpoint" wards and "ward yard" wards.

The IGO surveillances in the ten wards began in late May 2008. We started with a ward in Division One, and then moved sequentially to one ward in the other four Divisions. We then continued with the remaining five wards, one in each Division. The last surveillances were conducted the week of September 15, 2008.

Using in-person surveillance and GPS information, the IGO monitored the activity of the garbage truck crews from the start of the work day through lunch until the end of the day. We monitored a total of 77 out of the 84 crews in these ten wards, each for an average of approximately two days. Overall, IGO investigators observed 77 truck drivers (91% of the 84 total truck drivers in these wards) and 145 Laborers (86% of the total 168 Laborers in these wards). The IGO investigators monitored different crews, and different members of crews when the crews split up, particularly during the middle of the day or at the end of the day. This allowed the investigators to obtain data on the maximum number of crews by the end of the week.

IGO investigators had to conduct their surveillances in a manner that prevented the garbage truck crews from noticing them. Thus, they usually could not follow each member of the crew for every minute of the day. As set out below, the investigators typically focused their surveillances on certain periods at the beginning, middle, and end of the day.

Investigators typically did not follow the garbage trucks during the period in the morning when the truck was driving around and filling up its first load, and during the period in the afternoon when it was driving around and filling up its second load. If no observations were made during these periods, the IGO counted this as work even though the crew was not actually observed (whether working or not working) during this period. Thus, the IGO's calculations of waste and falsification are quite conservative and may well understate the level of waste and falsification actually occurring during the day.

For purposes of our investigation and this report, we considered "waste" to be those instances where the MTDs and/or Laborers (other than while on their authorized lunch break) were at a work location (e.g. a check point or Ward yard) but not working. We considered "falsification" to be those instances (other than while on an authorized lunch-break) where the MTDs and/or Laborers were not at a work location and were not working.

The IGO only counted time as waste and falsification if either the employee was observed not working during the period, or it was clear from observations or GPS records that this was the case.

B. The Investigation's Findings

1. Quantity of Waste and Falsification

The IGO investigation revealed consistently high amounts of falsification and waste in every one of the ten wards observed. The chart attached as Exhibit 2 shows the average levels of waste and falsification in the ten wards, broken down (i) by ward, (ii) between Laborers and MTDs, and (iii) between waste and falsification.

Overall, the IGO investigation found that Laborers did <u>not</u> work an average of 2 hours and 22 minutes while they were on the clock and being paid. This means that they were paid 8 hours of wages but only worked 5 hours and 38 minutes, on average. Thus, they did no work for 30% of their pay. These average figures were significantly worse in the "checkpoint" wards than the "ward yard" wards.

Specifically, in the checkpoint wards, the Laborers did no work for an average of 2 hours and 35 minutes each day (32.3% of the work day). One hour and 40 minutes of this was due to waste, and 55 minutes of it was due to falsification. Thus, the *average* Laborer in the checkpoint ward was at work but was not working more than 1 ½ hours per day – and was wholly absent from work for almost 1 hour per day. These facts are set out in the chart attached as Exhibit 3.

In the "ward yard" wards, the Laborers did no work for an average of 1 hour and 52 minutes each day (23.2% of the work day), as set out in the chart attached as Exhibit 4. One hour and 27 minutes of this was due to waste, and 25 minutes of it was due to falsification. (This significantly lower falsification number strongly suggests that it is more difficult for Laborers to falsify their time in a "ward yard" ward than a checkpoint ward.)

As to the MTDs, the IGO investigation found that they did <u>not</u> work an average of 1 hour and 32 minutes while they were on the clock and being paid (19.2% of the work day). This means that they were paid 8 hours of wages but only worked 6 hours and 28 minutes on average. These average figures were somewhat worse in the "checkpoint" wards than the "ward yard" wards, as detailed in Exhibit 1.

Combining the statistics regarding the Laborers and the MTDs, the average garbage truck crew employee did <u>not</u> work an average of 2 hours and 3 minutes per day (25.6% of the work day). In the checkpoint wards, this figure was 2 hours and 13 minutes, and the "ward yard" wards this figure was 1 hour and 40 minutes.

2. Patterns of Waste and Falsification

The IGO investigation revealed consistent patterns of falsification and waste throughout the day across all wards. The way garbage truck crews worked – and the manner in which they wasted

or falsified time – were very consistent across all ten wards. In general, there were three periods of time when the problems occurred: (i) the beginning of the day, (ii) in the middle of the day after the truck was filled for the first time, and (iii) during the last hour or two of the shift.

First, at the beginning of the day, the IGO observed that the Laborers and MTDs were both on the clock but not working an average of 36 minutes per day, from the time they swiped in to work in the morning until the time they arrived at the first alley and began working. (The IGO did not dock the MTDs for the driving time from the parking facility to the location where they picked up the Laborers. And in "checkpoint" wards, the IGO did not dock the Laborers for the driving time from the ward yard to the checkpoint.) The IGO observed many instances of waste occurring in the morning as the Laborers waited for the MTD to arrive with the garbage truck, often sitting in their cars at the first checkpoint or hanging around at the ward yard. There were also instances of Laborers falsifying during this period as they returned home or went elsewhere shortly after swiping in.

Second, by about mid-morning, the MTD would typically drop the Laborers at either the ward yard or the checkpoint and would drive to the dump. The IGO observed a large amount of waste and falsification during this period. Especially in checkpoint wards, Laborers committed a great deal of falsification after the garbage truck dropped them at the checkpoint and left for the dump. The most prevalent falsification pattern was for Laborers to drive to their residences or other locations in their personal cars, and then to remain at their residences or other locations well beyond their 30 minute lunch break – sometimes for 90 minutes or more. Some examples are detailed below. On average, the IGO observed 64 minutes of non-work per Laborer each day during this period of the work day, with most of this being falsification rather than waste. The numbers were notably higher in the checkpoint wards (75 minutes for the average Laborer) than in the "ward yard" wards (37 minutes for the average Laborer). The numbers for the MTDs were also lower (29 minutes on average across all wards).

Third, it was very common in both the "ward yard" wards and the checkpoint wards for the crews to simply stop working for the day even though there was a significant amount of time remaining before their normal swipe-out time. IGO investigators observed a very large amount of waste during this period in all wards. Typically, all the Laborers would return to the ward yard well before the end of their shift (usually about 30-60 minutes before the end of the shift) and wait to swipe out. IGO investigators regularly saw the Laborers sitting in their vehicles or otherwise standing around in the ward yard. The investigators never saw the Laborers doing any work at the ward yard during this period. During this period of the work day, the IGO observed on average 42 minutes of non-work per Laborer each day (most of which was waste rather than falsification), and these numbers did not change between the checkpoint wards and the "ward yard" wards. The MTDs on average did not work for 26 minutes

Instances of hard-working garbage crews were rare. In the seven checkpoint wards, the IGO observed over 107 Laborers on 57 trucks. Out of these 107, only 5 Laborers were ever observed hand-sweeping an alley, preparing an alley or doing any work whatsoever in the alleys while waiting for the garbage truck to return to the checkpoint. In addition, IGO investigators observed only two Laborers hanging "no parking/street sweeping signs" while the garbage truck was at the dump.

In the "ward yard" wards, only the Laborers in one ward were ever observed hand-sweeping an alley or vacant lot, and/or doing any work at all in the alleys while waiting for the garbage truck to return to the checkpoint. In this one ward (a Division Three ward), IGO investigators observed five out of a total of seven Laborer crews sweep and pick up litter in the alleys and vacant lots after the garbage truck left for the dump.

Overall, not a single MTD or Laborer was observed working a full day. Even the best-performing workers wasted at least 30 minutes per day.

Examples regarding waste and falsification throughout the day are described below.

(a) "Checkpoint" wards

Ward "I", Division Five, July 25, 2008 (a Friday).

IGO observations showed that after the two Laborers sat in their vehicles for about 30 minutes in the morning after swiping in, the crew worked for about 4 hours. For the remaining 3 ½ hours of the work day, the truck driver spent part of the time simply sitting in the parked garbage truck on the street. The laborers spent almost two hours at their homes and then, after meeting up with two other non-working-but-on-the-clock garbage truck laborers, drank beer, urinated on the street, and went to the ward yard to finally swipe out for the day.

Specifically, one Laborer, after swiping in to work, drove his personal vehicle from the ward yard to a Jewel/Osco parking lot and remain seated for 26 minutes before driving to the morning checkpoint. The other Laborer, after swiping in, drove from the ward yard in his personal vehicle to a McDonald's restaurant drive-thru. The Laborer then drove to the morning checkpoint and remained seated inside his vehicle for 31 minutes. The garbage truck was present at the checkpoint for 20 minutes before the two Laborers boarded it at 6:42 a.m. The garbage crew stopped work for the day at 10:55 a.m. (The crews' swipe out time was 2:30 p.m.) The garbage truck left the checkpoint and the MTD drove the truck to a corner store and then his residence. The MTD remained at his residence for 56 minutes. The MTD then drove the garbage truck to a street with a vacant building and a church and remained there for 16 minutes. From there, the MTD drove the garbage truck to a Streets and Sanitation parking facility. Both Laborers drove from the checkpoint at 11:00 a.m. and both went to their residences. One Laborer stayed at his residence for 1 hour and 52 minutes. The other Laborer was observed exiting his residence 1 hour and 35 minutes later and then driving to a liquor store. A few minutes later, the Laborer exited the liquor store carrying a bag of ice, walked to his vehicle, and emptied the bag of ice into an unknown container inside the Laborer's vehicle (a pick-up truck). The Laborer who went to the liquor store drove to a location near the ward yard where he was met by the other Laborer. Both Laborers were observed by IGO investigators for about one hour parked on the street and drinking beer out of plastic cups with two other BOS Laborers assigned to a different garbage truck in the same ward. One of the Laborers was observed urinating on the street before driving to the ward yard to swipe out.

⁹ After the Laborers departed, an IGO investigator recovered from the ground the plastic cups used by the Laborers to drink from. The plastic cups contained an amber liquid and had the odor of beer.

Ward "I", Division Five, July 22, 2008.

IGO observations showed that one of the Laborers worked only 5 hours 41 minutes, as a result of (i) spending 30 minutes in the morning at his house while on the clock after swiping in, (ii) taking a 97-minute lunch break (an hour of which was at home), and (iii) stopping work 40 minutes before swiping out. The other Laborer did not work a full day either, but notably worked hard sweeping alleys during the other Laborer's entire 97-minute lunch break. (This was one of just a few occasions when IGO investigators saw a Laborer sweeping an alley in a checkpoint ward during this investigation.)

Specifically, Laborer #1 drove to the ward yard, swiped in to work at 5:45 a.m. and then drove back to his residence. The Laborer remained at his residence for 52 minutes. Laborer #2 the MTD arrived at the checkpoint at 6:31 a.m. from the ward yard and began working. Laborer #1 joined them six minutes later. The garbage crew returned to the checkpoint at 10:41 a.m. The MTD dropped off the Laborers there and then proceeded to the dump. Laborer #2 swept the alleys and picked up debris from the ground for 1 hour and 37 minutes while the garbage truck was gone. Laborer #1 entered his personal vehicle and drove to his residence, where he remained for 1 hour; left his residence and went to a fast food restaurant for 20 minutes; left the restaurant and returned to the checkpoint where he remained seated inside his vehicle for 17 minutes until the garbage truck arrived at the checkpoint. During this period, the MTD drove to a Citgo gas station and remained there for 22 minutes; went to the dump for six minutes; then went to a Streets and Sanitation parking facility for 22 minutes. At 12:18, the MTD arrived at the checkpoint. At 12:22 p.m., the crew started working. At 1:49 p.m., the garbage truck crew returned to the checkpoint. Both Laborers returned to the ward yard and did not leave. The MTD drove the garbage truck to the parking facility.

Ward "A", Division One, May 27-29, 2008. 10

IGO observations showed that on three straight days, both Laborers on a truck took lunch breaks at home of 1 hour and 40 minutes or more. They also sat in their cars in the morning for more than 20 minutes while swiped in before starting to work, and stopped working about 40 minutes before swiping out. Thus, their work day was at most 5 hours and 50 minutes.

Specifically, on the morning of May 27 IGO investigators observed two Laborers remain seated inside their personal vehicles at a checkpoint for 23 minutes until the MTD and garbage truck arrived at 6:30 a.m. The garbage truck crew returned to the checkpoint at 10:28 a.m. The garbage truck MTD dropped off the Laborers there and then proceeded to the dump and the ward yard. Both Laborers entered their personal vehicles and drove to their residences. One remained at his residence for 1 hour and 40 minutes, and the other remained at his residence for 1 hour and 52 minutes. IGO investigators observed the Laborers go to their residences for similar periods of time on May 28th and May 29th as well. At the end of the day, the Laborers returned to the ward

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¹⁰ During the work week following Memorial Day – (Tuesday) May 27, 2008 to (Friday) May 30, 2008 – the garbage truck crews' work schedule was four ten-hour days, from 6:00 a.m. to 4:30 p.m. Their lunch break remained 30 minutes.

yard 40 minutes before their swipe out time and did not leave. The MTD returned to the parking facility.

Ward "C", Division Two, July 8, 2008.

IGO observations showed that both Laborers on a truck did no work for the first 30 minutes of their shift, took a 90-minute lunch break (sitting in their cars on the street), and then stopped working 90 minutes before the end of their shift. Thus, at most they worked a 5-hour day for their 8 hours of pay.

Specifically, IGO investigators observed two Laborers remain seated inside their personal vehicles for 15 minutes until the MTD and garbage truck arrived at the checkpoint at 6:37 a.m. At 9:39 a.m., the garbage truck MTD dropped off the two Laborers at the checkpoint and then departed for the dump. The Laborers entered their personal vehicles and remained seated inside their vehicles for 1 hour and 28 minutes until the truck returned at 11:07 a.m. At 1:00 p.m., the garbage truck arrived at the checkpoint and dropped off the Laborers. (This was 1 hour and 30 minutes before the crew's swipe-out time.) The garbage truck then proceeded to the ward yard. Both Laborers remained at the checkpoint talking for 21 minutes. The Laborers then drove in their personal vehicles to the ward yard and did not leave. The garbage truck driven by the MTD departed from the ward yard at 1:56 p.m. and went to the parking facility.

Ward "D", Division Two, August 26, 2008.

IGO observations showed that the Laborers on a truck sat around for 30 minutes in the morning, took a 90-minute lunch break, and then stopped working 45 minutes before the end of the day. Overall, they worked about 5 hours 20 minutes. In the morning, the crew began getting paid at 6:00 a.m. but did no work until 6:52 a.m.

Specifically, the crew swiped in by 6:00 a.m. Both Laborers arrived at the checkpoint by 6:12 a.m. and remained seated inside their personal vehicles for 30 minutes. At 6:42 a.m., the MTD and garbage truck arrived and the crew left. The garbage crew returned to the checkpoint at 9:32 a.m. The garbage truck dropped off the Laborers there and departed. One Laborer drove to his residence and remained there for 30 minutes; drove to a fast food restaurant where he remained for 38 minutes; drove to a convenience store where he remained for 15 minutes; returned to the checkpoint and remained seated inside his vehicle for 11 minutes. (IGO investigators lost the other Laborer in traffic and were unable to monitor him.) At about 11:19 a.m., the MTD and garbage truck arrived and the crew left. At 1:36 p.m., the garbage truck and crew returned to their checkpoint. The Laborers entered their personal vehicles and everyone drove away in their respective vehicles. At 1:48 p.m. IGO investigators set up a surveillance of the ward yard. One Laborer's vehicle was already observed parked there but the Laborer was not observed. At 2:18 p.m., the other Laborer was observed driving to the ward yard, where he remained seated inside his vehicle for 10 minutes.

¹¹ The garbage truck was not equipped with a functioning GPS unit.

Ward "G", Division Four, June 26, 2008.

IGO observations showed that a crew sat in their vehicles on the street for long periods of time while on the clock. Overall, they worked at most 5 hours 20 minutes while being paid for 8 hours of work. In the morning, the crew began getting paid at 6:00 a.m. but did no work until 6:40 a.m.

Specifically, the Laborers and MTD all swiped by their 6:00 a.m. start time. Both Laborers arrived at the checkpoint by 6:05 a.m. and they remained seated inside their personal vehicles until about 6:25 a.m. when the MTD arrived at the checkpoint driving the garbage truck. After the garbage truck arrived, the two Laborers and MTD remain seated inside their respective vehicles for an additional 15 minutes before the Laborers boarded the garbage truck and began working. The garbage crew returned to the checkpoint at 10:17 a.m. The garbage truck dropped off the Laborers there and then proceeded to the dump. Everyone was away from the checkpoint for about the next 55 minutes. One Laborer drove home and returned to the checkpoint at 11:08 a.m.; the other Laborer drove to a business area and returned to the checkpoint at 11:13 a.m.; the MTD drove to the dump and returned to the checkpoint at 11:12 a.m. Nevertheless, the entire crew then sat in their respective vehicles at the checkpoint for 49 additional minutes before returning to work. At about 12:10 p.m., the crew finally drove off in the truck. approximately 2:00 p.m. the garbage truck crew returned to the checkpoint. One of the Laborers remained seated inside his personal vehicle at the checkpoint for 22 minutes before driving to the ward yard where he swiped out at 2:30 p.m. Investigators were unable to follow the other Laborer, who drove away from the checkpoint at 2:00 p.m. The MTD also immediately drove from the checkpoint and went to the parking facility.

Ward "G", Division Four, June 26, 2008.

IGO observations showed that the two Laborers took lunch breaks of about 1 ½ hours, and the entire crew stopped working about 45 minutes before they swiped out.

Specifically, two Laborers arrived separately at the morning checkpoint in their personal cars. One Laborer arrived 35 minutes after he swiped in and at the same time that the truck arrived at the checkpoint. The other Laborer was observed sitting in his vehicle at the morning checkpoint when the truck arrived. The garbage truck dropped off the two laborers at a checkpoint at 10:20 a.m. One of the Laborers went to a YMCA for 54 minutes, and then went to a Subway restaurant. In total he was away from his work location for 1 hour and 25 minutes. The other Laborer drove to a residential neighborhood where he remained for 17 minutes. He then drove in his car for 33 minutes eventually arriving at his residence. He remained at his residence for 15 minutes. The Laborer then drove for 29 minutes back to the checkpoint. The MTD drove to the dump for 12 minutes and then to his residence. The MTD remained at his residence for 32 minutes. The MTD then returned to the checkpoint where he remained seated inside the garbage truck for 16 minutes. At the end of the day, the MTD and Laborers stopped work with 43 minutes left before their swipe out time. The Laborers returned to the ward yard and did not leave.

(b) "Ward yard" wards

<u>Ward "E", Division Three, June 11, 2008</u>. IGO observations showed that a garbage truck crew did not start working until about 30 minutes after the start of their shift, and then stopped working more than 90 minutes before the end of their shift.

Specifically, the garbage crew left the ward yard 27 minutes after swiping in. At mid-morning, the MTD drove the truck to the dump and then to a parking facility. In total the truck was away for 1 hour and 13 minutes. While the truck was away, the Laborers swept an alley for 46 minutes. The laborers then walked to and entered a convenience store. The Laborers remained inside the store for 19 minutes. The truck picked up the Laborers at the store and they returned to work in an alley. The truck and crew returned to the ward yard 1 hour and 35 minutes before their swipe out time. The MTD remained at the ward yard for 38 minutes before driving the truck to the dump and then to a parking facility.

<u>Ward "E", Division Three, June 13, 2008</u>. IGO observations showed that the crew did not start working until about 30 minutes after swiping in; the Laborers had a 1 hour and 15 minute lunch break; and then the crew stopped working over 1 hour before swiping out.

Specifically, the crew left the ward yard in the morning 30 minutes after they had swiped in. When the truck went to the dump later in the day, the two Laborers sat at a CTA bus stop for 40 minutes until the truck returned and picked them up. The entire crew then went to lunch for 36 minutes. The crew stopped work for the day 1 hour and 7 minutes before they could swipe out. The MTD drove the Laborers to the ward yard and dropped them off. The Laborers did not leave the ward yard. The MTD remained at the ward yard for 20 minutes and then drove to a parking facility.

Ward "B", Division One, August 18, 2008.

IGO observations showed that a garbage truck crew did not start working until nearly 40 minutes after the start of their shift; the crew took nearly an hour for lunch; and then the crew stopped working more than two hours before the end of their shift. During this time, the one Laborer on the crew washed his car and hung out at the ward yard for nearly 1 ½ hours.

Specifically, a garbage truck with an MTD and one Laborer began working 38 minutes after swiping in. During the mid-morning, the MTD went to a restaurant and remained there for 53 minutes; the MTD did not go to the dump during this period. The Laborer went to a gas station and was lost from view. The MTD and Laborer stopped collecting garbage at 12:24 p.m. The MTD drove to the ward yard and then to the dump and then to a parking facility. The Laborer drove his personal car to a car wash and stood outside of his car washing it for ten minutes. The Laborer then drove to the ward yard and remained there for 1 hour and 27 minutes until swipe out time.

Ward "B", Division One, August 19, 2008.

IGO observations showed that the crew stopped working about 2 ¼ hours before the end of the shift. During this time, the truck's sole Laborer spent about 80 minutes at home and 15 minutes at a restaurant/bar.

Specifically, at 6:15 a.m., an MTD arrived at the ward yard driving a garbage truck and picked up one Laborer (there was only one Laborer assigned to the truck). The MTD and Laborer departed the ward yard and drove to a McDonald's restaurant where they remained for seven minutes. At 12:05 p.m., the garbage truck dropped the Laborer off at the ward yard and drove away. The Laborer then drove from the ward yard in his personal vehicle to his residence where he remained for 1 hour and 20 minutes. The Laborer then exited his residence and drove to a restaurant/bar where he remained for 10 minutes. IGO investigators lost the Laborer in traffic for 33 minutes after he left the restaurant/bar but observed him at 2:21 p.m. arriving at the ward yard to swipe out. After dropping off the Laborer at 12:05 p.m., the MTD drove to a restaurant and remained there for 31 minutes. The MTD then drove to the ward yard and then to the dump. The MTD left the dump and returned to a Streets and Sanitation parking facility.

Ward "F", Division Three, September 10, 2008.

IGO observations showed that a garbage truck crew did not start working until 30 minutes after the start of their shift; the Laborer took a lunch break of about 1 hour and 15 minutes; and then the crew stopped working nearly an hour before the end of the shift.

Specifically, a garbage truck with an MTD and one Laborer left the ward yard 32 minutes after swiping in. The MTD dropped of the Laborer at the ward yard at 9:35 a.m. before going to the dump. The Laborer entered her personal vehicle, drove to a Speedway gas station, obtained food and a drink and drove back to the ward yard. That took 25 minutes. The Laborer remained seated inside her vehicle in the ward yard for an additional 53 minutes until the garbage truck returned. At the end of the day, the MTD drove the Laborer back to the ward yard 54 minutes before swipe out time. The MTD then drove to the dump and to a parking facility. The Laborer was observed sitting on a bench and walking in and out of the ward office until it was time to swipe out.

III. THE COST TO THE CITY

When the City paid wages to MTDs and Laborers and they did no work – whether they were present at the work site or not – taxpayer dollars were wasted. Based on the findings of this investigation, we calculated the estimated cost to the City of this waste.

In the ten wards observed during the investigation, we observed 91% of the garbage truck crews for at least some period of time. We calculated the total annual wasted wages in each ward on the assumption that the remaining crews acted no worse and no better than the observed crews — that is, we applied the average waste and falsification figures to the remainder of the crews. And we assumed that in the remaining weeks of the year, the crews would on average work no more and no less than they did during the week they were observed.

We multiplied the number of MTDs and Laborers in each ward by (i) the average amount of waste and falsification in that ward, (ii) the wage for the typical MTD (\$30.70) or Sanitation Laborer (\$28.92), and (iii) the number of work days in 2008 (which we estimated to be 235 after taking into account weekends, holidays, and the average number of vacation days).

This analysis resulted in an estimated total annual waste in these ten wards of \$3.7 million. The details of this analysis are set out in the chart attached as Exhibit 5.

We also conducted this analysis with regard to the likely amount of waste in the remaining 40 wards. Based on information provided by the Bureau of Sanitation, we divided these wards into "checkpoint" wards and "ward yard" wards, and calculated the figures on the assumption that the crews in these wards acted no better and no worse than the crews in the same type of ward observed during the investigation.¹²

This analysis resulted in an estimated total annual waste in these forty wards of \$10.6 million. The details of this analysis are set out in the chart attached as Exhibit 6.

Together, therefore the estimated annual wasted wages for the entire City because of waste and falsification by garbage crews is \$14.3 million.

As set out above, crews on average worked only 75% of the day. This suggests that the same amount of trash can be picked up by a workforce 75% the size, as long as those employees were actually working full eight-hour days.

If the City decided to keep the level of garbage-crew work at the levels observed by the IGO, and decided to reduce the workforce by 25%, the financial savings would include not only the wages calculated above, but also the benefits paid to these employees. In general, the City's Office of Budget and Management estimates that the cost of City benefits such as the type provided to garbage truck crews (pension, health insurance) is equal to 30% of the wages or salaries paid to the employee. Thus, reducing the workforce by 25% would also save an estimated \$4.3 million in benefits (\$14.3 million x 30%).

In addition, if the same amount of trash could be picked up with 25% fewer garbage truck crews, there would be approximately 25% fewer garbage trucks to operate. This would allow the City to save a substantial amount of money that it currently spends on fuel, repair, and maintenance of these trucks. BOS has approximately 470 garbage trucks and uses 351 of them for garbage pick up, according to BOS management. Our analysis of BOS expenditures for its garbage trucks showed that the average total maintenance cost per truck for 2007 was \$17,319 and the average total fuel cost per truck for 2007 was \$9,044. If BOS operated 25% fewer trucks (equal to 88 trucks), in fuel costs alone it would save \$795,872 annually. Assuming it had no maintenance costs for these trucks, it would save \$1,524,072 annually.

¹² The 42nd Ward only has one garbage truck. It is included in these estimates even though it is not managed by any of the five Division Superintendents.

¹³ In order to calculate the cost of replacing, maintaining and fueling the City's fleet of garbage trucks, the IGO selected a sample of ten garbage trucks that were observed by IGO investigators during our investigation and compared their purchase prices, total maintenance costs, and 2007 fuel costs. We do not attempt in this report to calculate any savings from reducing the size of the garbage truck fleet, although we note that the average purchase price of the garbage trucks in our sample was \$150,988.

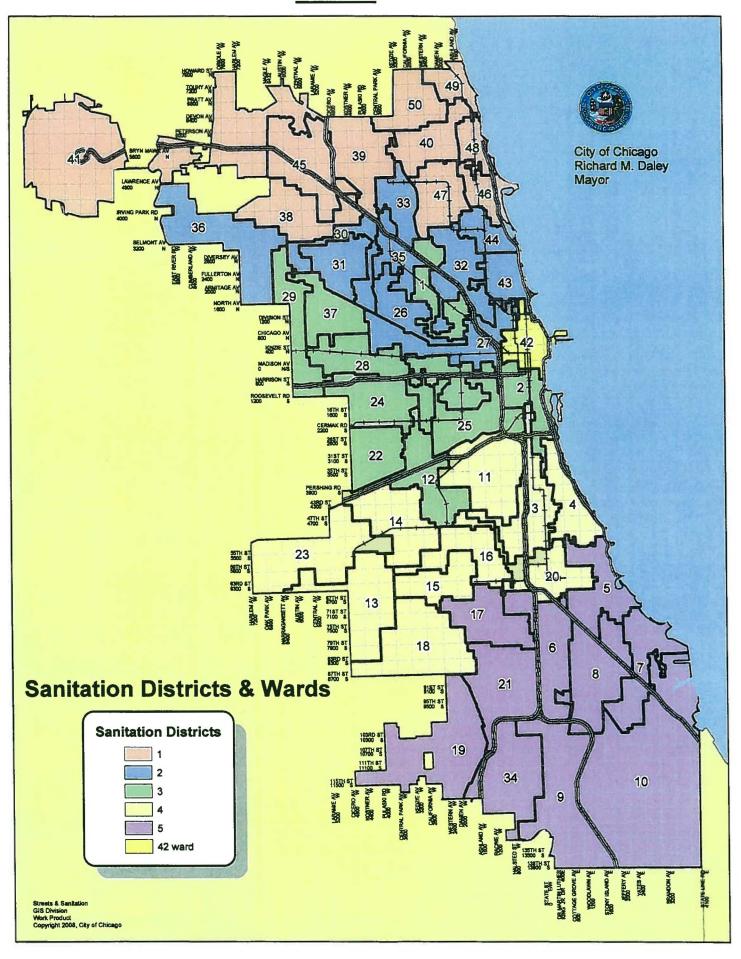
When the figures regarding benefits and truck operating costs are added to the figures regarding wages, the total potential loss to the City from the waste and falsification of garbage truck crews is \$20.9 million.

This investigation found that the Bureau of Sanitation's system for picking up garbage is inefficient and wastes millions of dollars in taxpayer funds. An estimated \$14.3 million in wages are being paid to garbage truck workers annually for time when they are doing no work.

If the City wants to keep the level of garbage service at its current level, it should be able to cut the BOS workforce dramatically. If the City wants to keep the BOS workforce at its current level, it should be able to provide dramatically better garbage service to the City's residents.

Whichever choice the City makes, BOS needs to radically improve its system for supervising its workers and ensuring that they are working during the time they are getting paid. Whether this is a problem at the ward level, the division level, or at higher levels in BOS is for Streets and Sanitation management to determine.

A system of strong supervision, supervisory accountability, and consistent enforcement should not have the kinds of problems observed here. The City residents deserve such a system so that their garbage is picked up efficiently without their tax dollars being wasted.



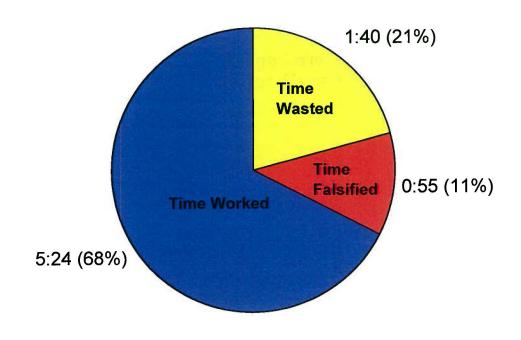
Bureau of Sanitation garbage crews: Waste and Falsification

Waste - Daily Average Falsification - Daily Average Waste and Falsification - Daily Average Division Type of **Observation Dates** Laborer MTD Overall Laborer MTD Laborer MTD Ward Overall Overall Ward (*) С 5-27-2008 to 5-30-2008 1:35 1:08 1:27 1:10 0:18 0:55 2:45 1:26 2:22 Α 1 В Υ 8-18-2008 to 8-22-2008 1:21 1:07 1:14 0:19 0:28 0:23 1:41 1:35 1:38 1 C 2 С 7-07-2008 to 7-11-2008 1:59 1:02 1:40 0:37 0:15 0:29 2:37 1:17 2:09 D 2 C 8-25-2008 to 8-29-2008 2:09 1:28 1:49 0:42 0:30 0:38 2:52 1:59 2:28 Ε 3 Υ 6-09-2008 to 6-13-2008 1:19 0:42 1:07 0:17 0:18 0:18 1:37 1:00 1:25 F 3 9-08-2008 to 9-12-2008 1:42 0:54 1:23 0:39 0:29 0:34 2:21 1:23 1:58 G 4 С 6-23-2008 to 6-27-2008 1:23 1:07 1:18 0:47 0:09 0:34 2:11 1:17 1:53 0:12 0:34 Н 4 С 8-04-2008 to 8-08-2008 1:28 1:25 1:27 0:55 2:23 1:38 2:01 5 1:20 1:23 1:21 0:20 0:57 2:36 С 7-21-2008 to 7-25-2008 1:16 1:44 2:19 5 9-15-2008 to 9-19-2008 1:44 1:38 1:41 0:55 0:21 0:41 2:39 1:59 2:23 Totals - All Wards 1:36 1:11 1:27 0:46 0:20 0:36 2:22 1:32 2:03 **Totals - Checkpoint Wards** 1:32 0:55 0:18 0:41 2:35 1:37 1:40 1:19 2:13 1:27 0:54 0:25 0:25 0:25 1:52 **Totals - Yard Wards** 1:15 1:20 1:40

(*) LEGEND			
Checkpoint Wards	С		
Yard Wards	Υ		

Overall figures may be higher or lower by one minute due to rounding

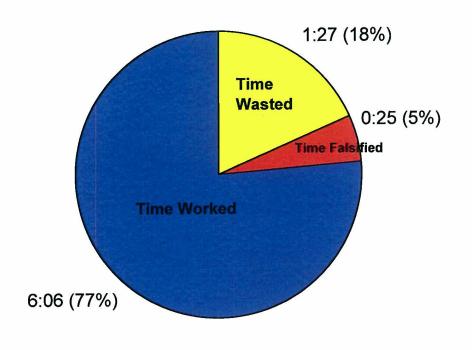
Average Daily Laborer Waste & Falsification: Checkpoint Wards



- ☐ Average Daily Laborer Waste
- Average Daily Laborer Falsification
- Estimated Daily Average Time Worked

(Circle = 8 Hour Day)

Average Daily Laborer Waste & Falsification: Yard Wards



- □ Average Daily Laborer Waste
- Average Daily Laborer Falsification
- Estimated Daily Average Time Worked

(Circle = 8 Hour Day)

Exhibit 5

Bureau of Sanitation garbage crews: Estimated Wages Lost Due to Waste and Falsification

Ward	Division	Type of Ward (*)	Observation Dates	No. of Laborers	Estimated Wages Lost Due to Laborer Waste & Falsification	No. of MTDs	Estimated Wages Lost Due to MTD Waste & Falsification	Total Estimated Wages Lost Due to Laborer and MTD
								Waste & Falsification
Α	1	С	5-27-2008 to 5-30-2008	20	\$374,966.00	9	\$93,567.60	\$468,533.60
В	1	Υ	8-18-2008 to 8-22-2008	14	\$160,584.90	7	\$80,687.25	\$241,272.15
С	2	С	7-07-2008 to 7-11-2008	16	\$284,669.60	9	\$84,261.60	\$368,931.20
D	2	С	8-25-2008 to 8-29-2008	18	\$351,555.30	10	\$143,326.50	\$494,881.80
E	3	Υ	6-09-2008 to 6-13-2008	15	\$165,604.50	7	\$50,945.65	\$216,550.15
F	3	Y	9-08-2008 to 9-12-2008	15	\$240,405.00	7	\$70,652.75	\$311,057.75
G	4	С	6-23-2008 to 6-27-2008	19	\$283,393.55	9	\$83,690.55	\$367,084.10
Н	4	С	8-04-2008 to 8-08-2008	17	\$277,053.25	9	\$106,765.20	\$383,818.45
1	5	С	7-21-2008 to 7-25-2008	21	\$373,234.05	10	\$125,255.00	\$498,489.05
J	5	C	9-15-2008 to 9-19-2008	13	\$235,357.20	7	\$100,805.60	\$336,162.80
			Totals - All Wards	168	\$2,746,823.35	84	\$939,957.70	\$3,686,781.05
Totals - Checkpoint Wards 124		124	\$2,180,228.95	63	\$737,672.05	\$2,917,901.00		
			Totals - Yard Wards	44	\$566,594.40	21	\$202,285.65	\$768,880.05

(*) LEGEND		
Checkpoint Wards	С	
Yard Wards	Υ	

Bureau of Sanitation Garbage Crews: Estimate of Lost Wages

Bulleau of Samilation Garbage Clews. Estimate of Lost Wages				
Information for Lost Wages Estimates				
Number of Checkpoint Wards	14			
Number of Ward Yard Wards	28			
Number of Mixed Wards	8			
Total Number of Laborers in Checkpoint/Mixed Wards	304			
Total Number of MTDs in Checkpoint/Mixed Wards	150			
Total Number of Laborers in Ward Yard/Mixed Wards	409			
Total Number of MTDs in Ward Yard/Mixed Wards	201			
Total Number of Laborers in All 50 Wards	713			
Total Number of MTDs in All 50 Wards	351			
Laborer Pay Rate	\$28.92			
MTD Pay Rate	\$30.70			
2008 Workdays	235 (366 days less 104 weekend, 9 holidays, 18 vacation)			

 Estimate of Wages Lost Due to Laborer	& MTD Waste and Fals	ification - 10 Wards Observed
Total Number of Laborers in Wards Observed	168	modulon to wards observed
 Total Number of MTDs in Wards Observed	84	
Estimated Wages Lost Due to Laborer Waste and Falsification for 10 Wards Observed	\$2,746,823.35	
Estimated Wages Lost Due to MTD Waste and Falsification for 10 Wards Observed	\$ 939,957.70	
Total Estimated Wages Lost Due to Laborer and MTD Waste and Falsification for 10 Wards Observed	\$3,686,781.05	

Estimate of Wages Lost Due to Laborer & MTD V	Waste and Falsification - Checkpoint/Mixed Wards Not Observed
Average Daily Laborer Waste and Falsification	2:35
Average Daily MTD Waste and Falsification	1:37
Estimated Daily Wages Lost Due to	
Laborer Waste and Falsification for Wards	
Observed per Laborer	\$74.87
Estimated Daily Wages Lost Due to MTD	
Waste and Falsification for Wards	
Observed per MTD	\$49.96
Estimated Wages Lost Due to Laborer	
Waste and Falsification for	
Checkpoint/Mixed Wards	\$3,167,001.00
Estimated Wages Lost Due to MTD Waste	
and Falsification for Checkpoint/Mixed	
Wards	\$1,021,432.20
Total Estimated Wages Lost Due to	
Laborer and MTD Waste and Falsification	
for Checkpoint/Mixed Wards	
	\$4 ,188,433.20

Estimate of Marca Last Due to Laborar 9 MED M	Mante and Calciffertion Mand Vand Missad Mande Nat Observed
	Vaste and Falsification - Ward Yard/Mixed Wards Not Observed
Average Daily Laborer Waste and Falsification	1:53
Average Daily MTD Waste and Falsification	1:20
Estimated Daily Wages Lost Due to	
Laborer Waste and Falsification for Wards	
Observed per Laborer	674.00
OSCOTTON POR EUROTOR	\$54.66
Estimated Daily Wages Lost Due to MTD	
Waste and Falsification for Wards	
Observed per MTD	\$40.99
Estimated Wages Lost Due to Laborer	
Waste and Falsification for Ward	
Yard/Mixed Wards	\$4,688,461.50
	* * *
Estimated Wages Lost Due to MTD Waste	
and Falsification for Ward Yard/Mixed	
Wards	\$1,733,877.00
YYAIUS	#1,133,011.00
T-1-1 (T-1)	
Total Estimated Wages Lost Due to	
Laborer and MTD Waste and Falsification	
for Ward Yard/Mixed Wards	
	\$6,422,338.50

Total Estimated Wages Lost Due to Laborer & MTD Waste and Falsification - All 50 Wards

\$14,297,552.75