



sanitation

Kathryn Garcia Commissioner

Testimony of Kathryn Garcia, Commissioner New York City Department of Sanitation

Hearing on the FY 2019 Preliminary Budget, Mayor's FY 2018 Preliminary Management Report and Agency Oversight Hearing before the New York City Council Committee on Sanitation and Solid Waste Management

Wednesday, March 14, 2018

1:00 P.M.

City Hall, Committee Room

Good afternoon Chairman Reynoso and members of the City Council Committee on Sanitation & Solid Waste Management. I am Kathryn Garcia, Commissioner of the New York City Department of Sanitation. Thank you for the opportunity to discuss the Department's portion of the Mayor's Fiscal Year 2019 Preliminary Budget, the FY 2018 Preliminary Mayor's Management Report, and our current programs and operations. With me this afternoon are Steven Costas, First Deputy Commissioner, and Larry Cipollina, Deputy Commissioner for Administration and Financial Management.

Preliminary FY 2019 Budget

As proposed, the FY 19 Preliminary Budget allocates \$1.71 billion in operating funds for the Department to perform our core mission of keeping New York City healthy, safe, and clean by collecting and managing more than 11,000 tons of refuse and recyclables per day, cleaning streets and vacant lots, and clearing snow and ice. In addition, the Department's proposed FY 19 capital budget is approximately \$407 million. Of this amount, \$301 million is allocated to facility construction and rehabilitation, \$13 million for information technology projects, and \$93 million to replace equipment and vehicles.

The proposed FY 19 budget also ensures the Department's ability to complete the implementation of the City's comprehensive Solid Waste Management Plan, advance our ambitious and expanding sustainability programs, and continue closure construction at the Fresh Kills landfill.

Delivery of Core Services

Clean streets and public spaces instill a sense of neighborhood pride and contribute to a high quality of life for New Yorkers. I am proud of the men and women of the Department who work hard to deliver essential sanitation services daily in all five boroughs. In Fiscal Year 2017, the Department achieved a record 95.9% citywide average scorecard rating, the highest in the history of the scorecard rating program. Through January of FY 18, the Department has achieved a citywide average scorecard rating of 94.7%. The FY 19 budget continues funding for the

Mayor's CleanNYC initiative, which includes expanded Sunday and holiday litter basket collection service and mechanical sweeping of approximately 100 miles of highway ramps and shoulders each week. In addition, as we discussed last week, the Preliminary Budget allocates \$3.2 million in FY 18 and \$2.3 million in FY 19 related to the Mayor's Neighborhood Rat Reduction Initiative.

Last summer, the Department released "Talk Trash," a video marketing campaign encouraging New Yorkers to do their share by putting litter where it goes – in a litter basket. We released this campaign with an event at "The Cage," the iconic basketball courts at West 4th Street in the Greenwich Village, and have distributed litter baskets painted to look like basketball hoops in parks and playgrounds across the City. I am pleased to share that video with you now.

Clearing snow and ice during winter weather ensures safe travel on the City's 19,000 lane miles of roadways. In FY 19, the Department's proposed preliminary snow budget is approximately \$84.1 million. Snow, sleet, and freezing rain fell on our streets on eight separate occasions this winter. The City also experienced one of the longest streaks of below freezing temperatures in recorded history this past January.

The adopted snow budget for FY 18 is \$84.1 million, though our estimated expenditures now stand at approximately \$86.1 million to date for this snow season through the end of February before the last three storms. The official total snowfall accumulation for the City during the 2017-2018 snow season currently stands at 27 inches, and to date this season we have used 392,333 tons of road salt.

Solid Waste Management Planning

We are working to complete development of the long-term infrastructure component of the City's comprehensive Solid Waste Management Plan (SWMP), a fair, five-borough plan that relies on sustainable rail and barge-based transport and reduces the impact of waste management on historically overburdened neighborhoods. The FY 2019 Preliminary Budget allocates \$411 million in export tipping fees for the Department's long-term export operations and current interim export operations.

Today, seven of nine long-term disposal facilities called for in the SWMP are operating. Three years ago, the Department opened the North Shore Marine Transfer Station (MTS) in College Point, Queens, the first of four converted marine transfer stations to be completed. Last spring, the Department completed the contracting process for the transfer, transport and disposal of containerized waste from the Hamilton Avenue and Southwest Brooklyn Marine Transfer Stations, and the Hamilton Avenue MTS began operating last September. Currently, that facility manages up to 960 tons per day. By September 2018, the Hamilton Avenue MTS will be accepting approximately 1,600 tons per day.

I am excited to inform this committee that by the end of Fiscal Year 2019, the Southwest Brooklyn MTS and the E. 91st Street MTS will be completed. The Preliminary Budget includes 12 additional maintenance staff – three at each MTS – to support these facilities going forward.

The completion of these facilities is the final step in implementing the City's long-term waste export program under the SWMP. The initiatives outlined in the SWMP will together reduce truck traffic in and around New York City by more than 5 million miles per year, reduce greenhouse gas emissions by 34,000 tons per year and contribute to a more equitable distribution of waste management infrastructure in New York City.

The Department also continues to work toward important reforms to the City's commercial waste system as well. Last year, the Department and BIC began working with a broad group of stakeholders, including businesses, the private carting industry, and environmental justice advocates to move toward commercial waste zones in New York City. With the help of a team of consultants, the Department is developing an implementation plan that will lay out a framework for establishing commercial waste collection zones to achieve our goal of creating a safe and efficient system to manage waste from New York City businesses that emphasizes high quality, low cost service and sets the City's commercial sector on a pathway to zero waste. We look forward to continuing our work with the City Council and stakeholders in this important process.

Recycling and Sustainability

The Preliminary Budget also reflects our commitment to achieving our goal of sending zero waste to landfills by 2030. This budget allocates a total of \$60.3 million in FY 19 to the Department's Bureau of Recycling and Sustainability for waste prevention, recycling and sustainability programs, including outreach and education, organics and community composting, textiles, electronic waste, harmful household products, reuse and donations, and zero waste schools, in addition to our recycling processing costs.

The Department continues to expand our NYC Organics curbside collection program. When the program began as a pilot in 2013, there were 3,500 households participating in the program. As of the end of 2017, the program serves more than 3.3 million New Yorkers. Today, 22 community districts have curbside organics collection service, and we will continue expanding this service this year.

Buildings in the remaining 20 community districts, which are high-density districts in Manhattan and the Bronx, can sign up online to receive organics collection service. Earlier this month, the Department added our first cohort of Bronx high-rise buildings.

In the last year, we have also increased the number of food waste drop-off sites citywide to 97. These new sites are part of "Compost on the Go," launched in partnership with GrowNYC to expand food scrap drop-off opportunities in underserved areas in Manhattan and the Bronx. By the end of 2018, the Department will achieve our goal of expanding NYC Organics to serve all New Yorkers through curbside collection or convenient neighborhood drop-off sites.

The Preliminary Budget also allocates \$117,500 in FY 18 and \$70,000 in FY 19 to support the development and implementation of a food donation portal pursuant to Local Law 176 of 2017. The Department is currently on-track to launch the food donation portal by the March 2019 deadline specified in the local law.

The Department is also working with our partners, Housing Works and ERI, to expand our refashionNYC and ecycleNYC programs in apartment buildings. As of January 2018, there nearly 150,000 households across the City have access to the refashionNYC program, which has collected and diverted more than 12 million pounds of textiles for reuse and recycling.

The ecycleNYC program is the most expansive electronic waste collection service offered by any municipality in the country. Since its inception in November 2013, ecycleNYC's apartment program has grown to service more than 800,000 households across the City. In 2017, the Department also expanded curbside e-waste collection to districts in North Brooklyn. This fall, we will expand that service to the rest of Brooklyn and western Queens. The Department continues

to encourage residents to attend its SAFE Disposal Events, utilize its special waste drop-off sites, or take advantage of existing take-back options for the disposal of their unwanted electronic waste. Once again, this spring we will host five SAFE Disposal events, one in each borough. New Yorkers can find out more about these events our website at nyc.gov/safedisposal or by calling 311.

Closing Remarks

In closing, I wish to thank Chair Reynoso and the other members of this committee for continuing to work as a close partner and for your commitment to our work. Your support is critical to our ability to achieve our mission to keep New York City healthy, safe, and clean. Thank you for this opportunity to testify this afternoon, and I am now happy to answer your questions.

NY City Council Hearings of the Sanitation and Solid Waste Committee
March 14, 2018

Testimony by Brendan Sexton
Brendan Sexton Consulting & former Sanitation Commissioner of NYC

- In the late 80's, I was very proud of the Department and our work, very proud. But I was embarrassed when I ran into demonstrators in City Hall Park who were protesting our trucks for their relationship to *asthma*. I had honestly never thought about this. So I decided to study it a bit. I learned that asthma is a major killer of children—especially urban, poor children - -and while asthma causation is still partly a mystery, diesel exhaust is one of the only established and agreed-upon asthma triggers.
- I was horrified that while we were proud to be cleaning the streets throughout the City's many neighborhoods, we also were apparently dirtying the air in those same neighborhoods. I asked DSNY's truly gifted engineers what we could do to better protect our children's' health.
- We tried out the first natural gas trucks and street sweepers.. They were much cleaner and mercifully quieter. But the early technology did not operate to our standards. The trucks did not have the torque we needed for snow work, and their reliability was unsatisfactory.
- Today after two decades of development, not only do these engines work as well or even better than standard diesels, but they can take advantage of a fuel even cleaner than conventional natural gas. That is the renewable non-fossil, non-fracked form of natural gas requiring no-drilling and made from organic waste called "RNG."
- While diesel engines long had the benefits of power and fuel use efficiency, I have become convinced that they are an outmoded choice as the natural gas models have the power to do what NYC trucks need to do- collect garbage and plow snow--with less noise and hugely less pollution or carbon impact. Particulates—the pollution most linked to asthma and other lung problems are especially lower with NG engines.
- Today, the DSNY, which has been a real leader, universally admired for testing and implementing new truck technologies as well as in spearheading a vital initiative for separate collection of organic wastes, is at risk of losing this leadership position as so many other cities and private haulers across the country have left diesel behind for more modern and cleaner alternatives. More than half the refuse trucks on order today—for private commercial haulers AND for municipal fleet--are for natural gas models. Some fleets are also experimenting with electric trucks, but the big choice the current market is natural gas.
- Considering there are alternatives that are affordable and immediately available, I don't believe it can be considered state of the art practice to go on purchasing and deploying heavy-duty diesel trucks in our crowded City.
- It is worth a mention that the term "bio-diesel" as used now in vehicle and fuel marketing is almost irrelevant, close to deceptive, when considering cleaning up our fuels. "Biodiesel" is used to describe fuels from b5 to b20—at the highest end of this chain, b20 is 20% vegetable oil. Sounds great, but this fuel is still 80% diesel. That truck going down your street will not protect the children living or playing there. It will not contribute greatly to the City's carbon goals.
- And we do not have to wait for electric battery technology to mature. *Natural gas trucks are available off the shelf NOW, competitively priced and increasingly the choice of professionals in the field.* Equipped with these trucks, burning CNG, or preferably RNG-- renewable natural gas--the Department and the City can be right at the leading edge of sustainable heavy duty transport.



Testimony Before the New York City Council Committee on Solid Waste Wednesday, March 14, 2018

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Good afternoon, my name is Louis Bailey and I testify today on behalf of WE ACT for Environmental Justice. WE ACT's mission is to build healthy communities by ensuring that people of color and/or low-income residents participate meaningfully in the creation of sound and fair environmental health and protection policies and practices. We organize residents across the four community boards (9,10,11, and 12) in Northern Manhattan, and we are a membership organization with almost 700 members who live work and vote uptown.

Today, I am here to raise WE ACT's voice once again to say, "No More Diesel". In the 1990's WE ACT led the fight against dirty diesel buses and depots because the communities of West, Central, and East Harlem along with Washington Heights and Inwood were home to more than a third of the nation's largest diesel bus fleet (six out of seven Manhattan bus depots are located in Northern Manhattan) and the city's highest rates of asthma hospitalization. Along the way, WE ACT and several other organizations, some here today and other not, can be proud of our efforts that resulted in changes in the MTA New York City Transit bus fleet. Today, most the buses are diesel electric hybrids burning ultra-low sulfur diesel, which WE ACT also fought for at the federal level of government, or they are compressed natural gas. Because of those changes, the emissions profile of the bus fleet has improved significantly over the years.

Today, we are here to talk about city fleets and two reasons that we need to phase out the procurement of vehicles that use diesel for the sanitation's medium and heavy-duty fleets. We believe that this step is needed to get Northern Manhattan neighborhoods and other Environmental Justice communities across the city to have better air quality, mitigate the city's contribution to the climate crisis, and improve health outcomes.

In Northern Manhattan, several of our sanitation truck depots (the East Harlem (CB 11) and the Washington Heights/Inwood (CB 12) depots) play host to vehicles that service the upper East Side and are supposed to be in that neighborhood, one of the wealthiest in the entire nation. The sanitation truck depots in Northern Manhattan are in very close proximity to residential housing and schools. WE ACT believes that the proximity of these diesel vehicles to the places where children, seniors, and those with medically diagnosed respiratory illnesses only further exacerbates negative health outcomes in our communities. WE ACT has worked with the residents of Northern Manhattan to get these depots moved and/or improved and to ensure that vehicles for the upper East Side are placed in that neighborhood and not dumped in ours.

We urge this committee to address those siting issues that provide a disproportionate burden on some communities that play host to diesel medium and heavy-duty fleets like street sweepers and trucks and at the same time we need to eliminate or significantly reduce the dirty emissions from the city's diesel fleets to improve the air that those New Yorkers that live closest to these depots breathe. Our path to cleaning up those fleets is to commit as a city to saying, "no more diesel". There are reliable alternatives to diesel that are non-fossil based and the communities on the frontlines of the climate crisis and the asthma epidemic need that change now.

Second, the city has set ambitious greenhouse gas reduction goals and clean air goals and we fully support them in that endeavor. These goals are aimed at cutting GHGs 80% in city fleets by 2035 from 2005 levels and having the cleanest air of any major city in the US by 2050. But the city's own 2015 clean fleet plan shows that it has barely any chance of meeting these goals if they continue to buy medium and heavy-duty trucks powered by diesel or biodiesel fuel. If we are serious about protecting vulnerable communities from the ravages of another Super Storm Sandy or worse and if we are committed to leading on these goals, then we must move away from long term commitments to diesel. We can start with phasing out the procurements of diesel sanitation vehicles.

Thank you.



NY City Council Preliminary Budget Hearings Committee on Sanitation and Solid Waste Management

Supporting Documentation for Energy Vision's Testimony

March 14, 2018

We appreciate the chance to present Energy Vision's research findings at these important budget hearings, specifically regarding New York City's vehicle procurement expenditures and how they may contribute most to our City's progress in attaining the ambitious greenhouse gas (GHG) reduction, clean air and zero waste goals in the *NYC Clean Fleet* and *OneNYC* plans.

Energy Vision, a national environmental non-profit organization, is a recognized authority on waste and clean fuels issues. We report on strategies that can move our country most rapidly toward a sustainable future, and conduct outreach and workshops educating citizens and public and private sector leaders on the most constructive options for change.

In tracking the development of all vehicle fuels, we have come to focus particular attention on an emerging transportation fuel for heavy-duty buses and trucks that has all the characteristics for sustainability. This gaseous fuel is made from a renewable resource (organic wastes) and involves no drilling. When it is burned, it generates virtually none of the particulates or other health-threatening emissions related to diesel fuel, and it is by far the lowest carbon fuel commercially available today.

Our analysis of the City's *NYC Clean Fleet* document shows that the City has made some distinct progress toward its clean air and greenhouse gas reduction goals with shifts of light-duty vehicles to electric models and integration of biodiesel blends fleet-wide. However, reaching them requires a major shift away from diesel fuel, above and beyond the approaches laid out in the 2015 *Clean Fleet* plan. And we find no reference to the waste-based gaseous fuel strategy that Energy Vision has found to be a viable option today, which we will describe further, and which offers the best chance for the City to meet or even exceed its important fleet goals.

We believe that the City can no longer justify spending money on new diesel vehicles, now that much cleaner, cost-effective commercial alternatives exist. One step the City can take, starting with the FY 2019 budget, is to require agencies proposing fleet purchases linked to the annual vehicle procurement budget to select heavy-duty vehicles that are available in zero or near-zero emission models.

The Vehicle Fleet Goals set for New York City

Recognizing climate change to be "an existential threat to New Yorkers and the world," New York City has set a goal of cutting its greenhouse gas emissions 80% by 2050 (against a 2005 baseline) and has included an ambitious goal of cutting these emissions from its fleets by 80% even sooner – by 2035. The City's OneNYC Plan also aims to achieve the best air quality of any major American City by 2050.

The City's *NYC Clean Fleet* plan identifies specific strategies for achieving emissions reductions for its roughly 17,000 light-duty vehicles, some to be applied fleet-wide, but only three broad options for the roughly 10,000 medium and heavy-duty diesel vehicles operated mostly by the Department of Sanitation, Parks Department, NYC Department of Environmental Protection and Department of Transportation.

Energy Vision's analysis has found that, as structured, it has barely any chance of meeting the goals, largely because of inadequate measures for the diesel-burning heavy-duty trucks which generate the largest share of both GHGs and health-threatening particulate, sulfur dioxide and nitrogen oxide emissions. The good news, however, is that affordable modifications to procurement practices for the heavy-duty portion of the fleet could enable the City to meet its goals or go beyond them.

Looking at its greenhouse gas reduction goal first: in setting its 80x35 GHG reduction goal, the City’s 2015 *NYC Clean Fleet* report works from 2005 baseline emissions of 285,000 metric tons a year; to achieve an 80% GHG reduction goal by 2035, total emissions must fall to 57,000 metric tons. With 2015 emissions from the 27,000 fuel-burning vehicles in City fleets at 255,000 metric tons, emissions must still be cut by an additional 198,000 metric tons of carbon-dioxide equivalent (“CO2e”),¹ or 77%.

At the time of the 2015 report, 40% of total fleet fuel was gasoline (11.7 million gallons),² used in light-duty vehicles, with related emissions of about 98,000 metric tons of CO2e.³ The other 60% of fuel was diesel blends (17.5 million gallons) used in heavier vehicles with related emissions of 162,000 metric tons of CO2e.⁴ With diesel vehicles responsible for this large share of GHG emissions (63%), reaching the “80x35” goal will require significant diesel displacement.⁵

The Clean Fleet Plan Can’t Reach its GHG Reduction Goal using Strategies it Proposes

The *NYC Clean Fleet* plan enumerates four strategies to be implemented fleet-wide. It sets a specific goal for its light-duty cars and trucks – adding 2,000 electric vehicles (EVs) by 2025, of which 1,000 have already been added. It also designates two specific fuel efficiency fleet goals, and a specific anti-idling goal. Achieving all of these would take the fleet 33% of the way to its goal. What about the rest?

For the City’s heavy-duty diesel vehicles, *NYC Clean Fleet* identifies three strategic options:

- **Option one** involves using high biodiesel blends (20% year-round and 50% seasonally) in all these vehicles, which would cut GHGs 10%, bringing the total GHG reduction, when combined with the “whole-fleet” measures, to 43%.
- **Option two** involves using high biodiesel blends in half the fleet and compressed natural gas fuel in the other half, cutting more GHGs – 14% – and bringing the total GHG reductions to 47%.
- **Option three** involves using “renewable diesel fuel” in one-third of the fleet, and high biodiesel blends and CNG in the other two-thirds, cutting GHGs by 34% and bringing the total GHG reduction up to 67% out of the 80% required by 2035.

The report includes two diesel displacement strategies – natural gas and renewable diesel – but simultaneously claims considerable impediments to deploying them. First, it labels infrastructure upgrades for managing CNG (primarily ventilation in the depots) as a “formidable” obstacle. Then, it notes that renewable diesel is unavailable in the northeastern United States and it is uncertain when it might become available. Nonetheless, the charts below (and on the following page) list all the strategies and the greenhouse gas reductions envisioned by each.

The NYC Clean Fleet Plan’s four Emission Reduction Strategies, IF applied to all City Vehicles (“whole-fleet measures”), and their Impacts on Greenhouse Gas Emissions

Measures being applied to whole fleet	% GHG reduction	Reduction in metric tons	% GHG reduction remaining	Reduction in metric tons remaining
Whole-fleet 1: Add 2,000 electric vehicles	9%	22,950	71%	175,050
Whole-fleet 2: Meet EPA 2018 fuel economy standards for medium and heavy duty vehicles	10%	25,500	61%	149,550
Whole-fleet 3: Meet EPA 2025 fuel economy standards for light duty vehicles	9%	22,950	52%	126,600
Whole-fleet 4: Anti idling & stop-start technology	5%	12,750	47%	113,850
Whole-fleet GHG reduction total	33%	84,150	47%	113,850

Three diesel-specific Emission Reduction Options, on their own and combined with “whole- fleet” measures

Diesel Strategy 1: All vehicles on higher biodiesel blends	
Diesel 1, % GHG reduction	10%
Diesel 1, reduction in metric tons	25,500
% reduction combined with all Whole-fleet measures (33%)	43%
Reduction in metric tons combined with Whole-fleet measures (84,150)	109,650
% GHG reduction remaining	37%
Reduction in metric tons remaining	88,350

Diesel Strategy 2: Half fleet on higher blends, half on CNG	
Diesel 2, % GHG reduction	14%
Diesel 2, reduction in metric tons	35,700
% reduction combined with all Whole-fleet measures (33%)	47%
Reduction in metric tons combined with Whole-fleet measures (84,150)	119,850
% GHG reduction remaining	33%
Reduction in metric tons remaining	78,150

Diesel Strategy 3: Divide fleet between higher blends, CNG and renewable diesel	
Diesel 3, % GHG reduction	34%
Diesel 3, reduction in metric tons	86,700
% reduction combined with all Whole-fleet measures (33%)	67%
Reduction in metric tons combined with Whole-fleet measures (84,150)	170,850
% GHG reduction remaining	13%
Reduction in metric tons remaining	27,150

Procurement Options for Diesel Displacement in NYC’s Medium- and Heavy-Duty Fleets

The city’s diesel fleet consumes 60% of the city’s fleet fuel and generates 63% of fleet-related greenhouse gases (GHGs), making it the most important target for reducing emissions of GHGs, nitrogen oxides (NOx), and particulate matter (PM). Energy Vision has been exploring options for diesel displacement since 2007.

Biodiesel Blends. First, it is necessary to note that the City has expressed great pride in its use of “biodiesel blends,” even calling them a fossil-fuel “alternative.” But they are not, in fact, a true fuel alternative. The 20% blend is still 80% petroleum-diesel, and at best, a 50% biodiesel blend in summer months still relies half on conventional diesel. These blends offer modest clean air benefits but they bear no resemblance to the big steps forward needed to clean up our air and cut GHGs in the City’s heavy-duty truck fleets.

Electric Vehicles. While EV’s – a true alternative – are proven at the light duty level, the technology for the heavy-duty sector is still in development. Electric heavy-duty trucks still lack the power and torque needed to perform adequately in NYC for the largest and highest impact diesel fleet – the 2,100 refuse trucks operated by the Department of Sanitation (DSNY) – which must both collect garbage and plow snow. They have also not performed consistently or well in snow, heat or on hilly terrain. Their cost at present is nearly double that of conventional diesel models, and considerably higher than natural gas models. Nonetheless, the City would do well to explore and pilot all-electric options for the future, especially for medium-duty vehicles as well as transit buses, as the MTA/NYCT fleet is now doing.

Compressed Natural Gas. This second fuel option – a fossil fuel but by far the cleanest of these fuels – is viable right now for all city vehicles powered by diesel or biodiesel, and has many advantages. Natural gas currently fuels approximately 150,000 transit buses, tractor-trailers and garbage trucks around the country. As the 42 CNG refuse trucks operated by DSNY have already shown, these vehicles can both collect garbage and plow snow. Combined with new “Near Zero” emissions engine technology, certified by both the California Air Resources Board and the US EPA, CNG use not only cuts greenhouse gas emissions by 30% compared to diesel, it also slashes health-damaging fine particulate and nitrogen oxide emissions 90% below the most stringent EPA standards. Further, the noise levels of natural gas engines are 50-80% lower than those of diesel engines. A shift to natural gas trucks would protect the health of the communities in which they operate, and allows citizen to sleep at night. It would also protect the health and hearing of truck drivers and fleet maintenance officials.

There is sufficient natural gas refueling infrastructure to serve hundreds more natural gas trucks today, with seven operational stations within the five boroughs that can serve agency fleet vehicles. The Department of Sanitation (DSNY) dispenses CNG from its Woodside, Queens garage (and refuels at another public-access station in Greenpoint, Brooklyn) and the Department of Parks from two. Public-access stations also exist at LaGuardia airport, JFK and at a National Grid location in Canarsie. A new public-access CNG station is

scheduled to open in the Bronx this spring in close proximity to a DSNY depot where 77 trucks are housed. Finally, there is a CNG station located at the Covanta waste-to-energy plant in Newark, New Jersey, to which DSNY trucks make over 100 visits a day. This station was built with the encouragement of DSNY, but has never refueled a single DSNY truck. According to the NYC *Fleet Maintenance Manual*, the City already “offers contracts for fueling at... private CNG fueling sites,”⁶ and other private station developers have expressed strong interest in building additional stations.

As with any technology, design, permitting, safety and other considerations must be taken into account. However, the “formidable obstacle” to expanded use of natural gas trucks referred to in the *Clean Fleet* plan — the need to modify garages with proper ventilation — has been overcome at multiple locations. There are costs associated with these changes, but there are no engineering or technical challenges that cannot be met with current technology, as evidenced by indoor depots housing CNG transit and refuse fleets nationwide— including in New York City. For outdoor depots, of which there are many in NYC, this is not an issue.

Renewable Diesel. New York City in 2017 committed to piloting renewable diesel in its existing heavy-duty fleets. The interest in this fuel (also known as “green” diesel) arises from it being a drop-in substitute for diesel, requiring no alterations to fuel or vehicle – a huge advantage for large fleets currently using diesel.

While renewable diesel is made from similar materials as biodiesel — animal fats or vegetable oils — the two fuels are different. The process that makes renewable diesel replaces oxygen from the feedstock with hydrogen, which is supposed to make for a cleaner burn and a higher energy value than biodiesel. However, the fuel is in relatively short supply in the U.S. at present, and it is also considerably more expensive than conventional low-sulfur-diesel fuel.^{7,8}

Renewable diesel offers modestly lower levels of particulate matter (PM), hydrocarbons and nitrogen oxides (NOx) than ultra-low-sulfur diesel.⁹ But based on lifecycle emissions assessments by Argonne National Labs, the advantages of renewable diesel are hard to quantify. On a “well-to-wheels” basis (taking into account the environmental impacts of every stage of the fuel’s production and transportation, right up to it being combusted in a vehicle), GHG emissions from renewable diesel, depending on feedstock, are unquestionably lower — between 36% and 81% lower — than diesel. However, for NOx, sulfur oxides (SOx) and PM, renewable diesel appears, consistently across feedstocks, to have higher emissions than low sulfur diesel, often significantly so.

Renewable Natural Gas (RNG). The third option, mentioned earlier, is not a fossil fuel at all. It is the gaseous biomethane fuel (also referred to as Renewable Natural Gas, or “RNG”), which is made from captured methane gases that are naturally emitted by decomposing organic wastes. This has emerged as the most significant diesel displacement option, as it is made from a renewable resource (organic wastes), offers the lowest GHG emissions of any fuel, and produces the same low NOx, SOx and PM emissions as CNG. Further, because RNG production puts what was for decades considered garbage – organic waste – to valuable use, it can help NYC and other cities across the country meet their zero waste goals. *In fact, New York City’s food waste alone (approximately 1.2 million tons per year from commercial and residential sources) — if diverted to specialized tanks known as “anaerobic digesters” — could produce more than enough biomethane to displace the entire 17.6 million gallons of diesel now used to power ALL of the City’s 6,300 heavy-duty trucks¹⁰.*

Because RNG is chemically similar to conventional natural gas, it can be used in the same fully commercial CNG engines discussed above, with no modification to engines or fuel required. Since biomethane fuel can travel through the same natural gas infrastructure that now delivers CNG, a change in purchasing — through strictly contractual arrangements — would enable all existing natural gas vehicles, including MTA buses, to buy this ultra-low-carbon fuel instead. Moreover, the two major providers of natural gas vehicle fuel to NYC fleets today – Clean Energy Fuels and Love’s/Trillium—have both expressed their willingness to provide this fuel at the same cost as CNG.

This fuel’s environmental advantages are of particular importance. Because it involves no fracking or other forms of drilling, it can attract the support of city leaders and environmentalists alike. Further, it reduces lifecycle GHG emissions by 70% to 300%, as compared to petroleum-based fuels. Made by capturing and refining the methane gases emitted as organic wastes decompose, biomethane is a low-carbon winner. And if food wastes or animal manure are the primary source of the biogases, the fuel can actually be *net-carbon-negative*. That’s because the methane captured from these feedstocks in the fuel’s production — that would otherwise escape into the atmosphere — far exceeds the carbon dioxide emitted when combusted in a vehicle.

Biomethane is a fully commercial option. It is being used in 20,000 trucks and buses across the US. The entire Santa Monica, CA bus fleet is converting to biomethane fuel and “Near-Zero” engines. In Los Angeles, LA Metro recently purchased close to 300 new transit buses using the Near Zero engine/ biomethane combination, and is considering conversion of its entire 2,200-bus fleet.

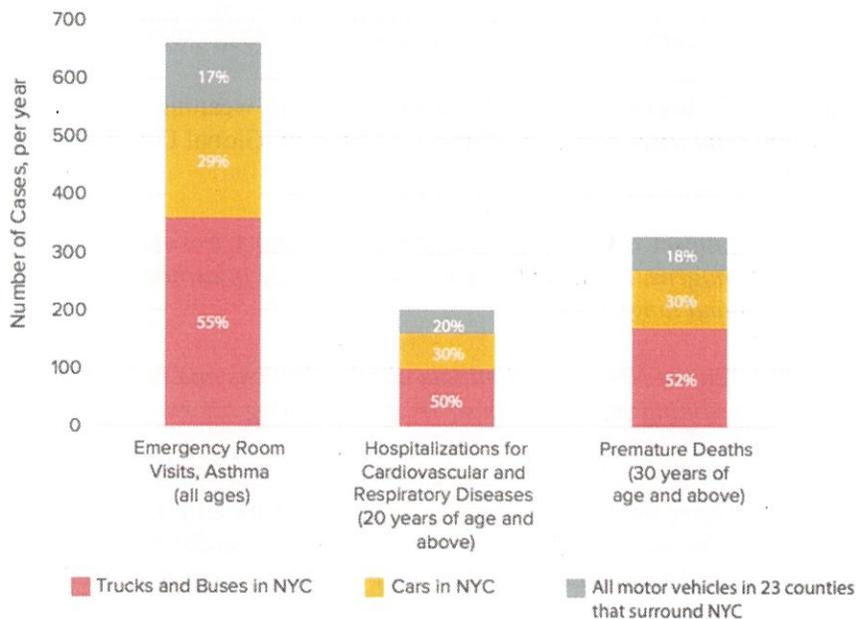
Hundreds of UPS trucks around the country are fueled with biomethane. Many private waste haulers including Republic Services and Waste Management, the nation’s largest hauler with 6,000 natural gas trucks. Several large cities, including Portland, OR and Toronto, Ontario, are also developing projects now to produce this fuel from their own solid waste and wastewater operations for use in fleet vehicles. Sacramento, CA has been doing this for five years.¹¹

Deploying Biomethane: A Clean Air Strategy Protecting Millions of New Yorkers

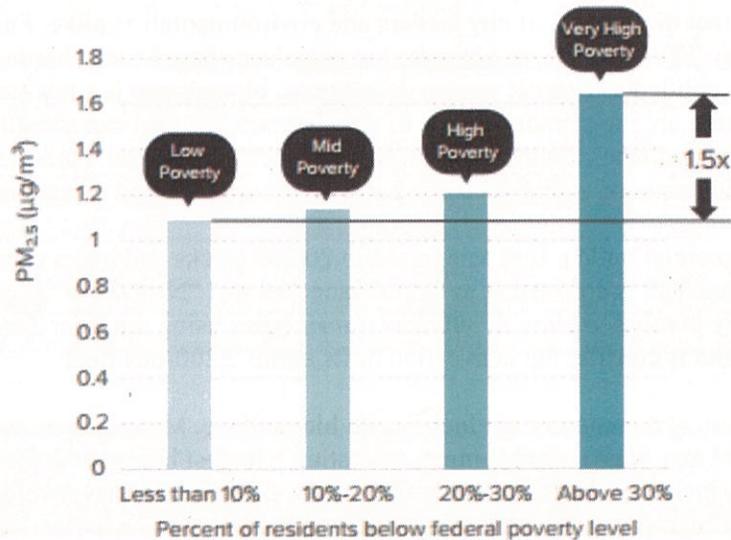
The three alternative fuel strategies discussed above — Electric, Compressed Natural Gas (CNG), and Biomethane — would enable a complete transition away from diesel. And from a public health perspective, diesel displacement deserves to be a high priority. Many studies in the U.S., Europe and beyond have documented the health risks caused by diesel emissions.

In New York City, according to the April 2017 *Community Air Survey*, “the largest share of adverse health outcomes from traffic came from trucks and buses traveling the city’s streets, accounting for more than half of PM_{2.5}-related health outcomes from on-road traffic.” Moreover, the adverse health effects associated with diesel emissions disproportionately influence the highest-poverty neighborhoods – 1.5 times higher levels of PM_{2.5} and 8.3 times higher rates of asthma emergency room visits as compared to affluent neighborhoods, highlighted in the figures below.¹²

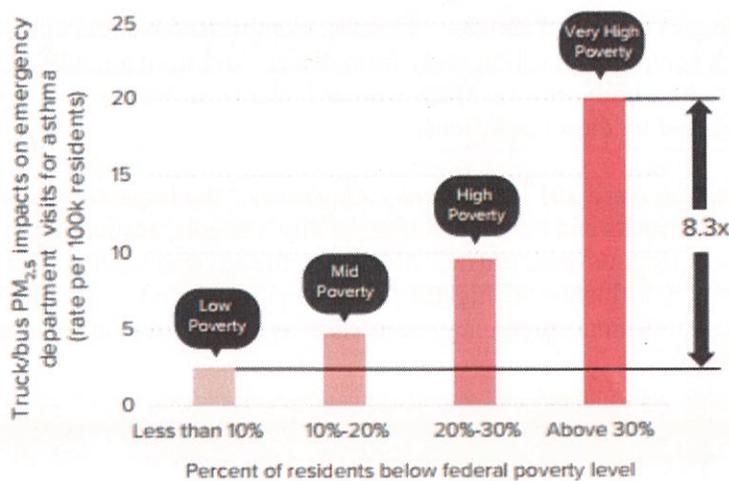
Annual Health Impacts of Traffic-Related PM 2.5 Exposure in New York City



PM 2.5 Exposure in Relation to Poverty; NY Metropolitan area



Asthma-Related Emergency Room Visits and Poverty; NY Metropolitan area



Source (3 Charts): NYC Community Air Survey, 2008-2015

Summarizing the health dangers of diesel emissions and the importance of weaning NYC fleets from use of this fuel, one of the foremost medical authorities, Dr. Philip J. Landrigan, Global Director of Public Health at Mount Sinai, has stated:

“The air pollution produced by diesel exhaust contains potent respiratory irritants, metabolic toxins and proven human carcinogens. Diesel exhaust is a known cause of asthma, cardiovascular disease, stroke and lung cancer.

I strongly recommend that the City of New York eliminate all diesel trucks and buses from the City’s fleet and replace these polluting vehicles with safer, non-polluting alternatives.

This enlightened and visionary action will reduce rates asthma among our children. It will reduce myocardial infarctions cardiac arrhythmias and strokes among New York City’s adults. It will reduce risk of lung cancer. And because it will prevent many cases of these debilitating diseases, the elimination of diesel trucks and buses from New York City’s vehicle fleet will reduce health care costs and save the City money.”

Targeting Diesel Displacement: NYC’s Heavy-Duty Fleets

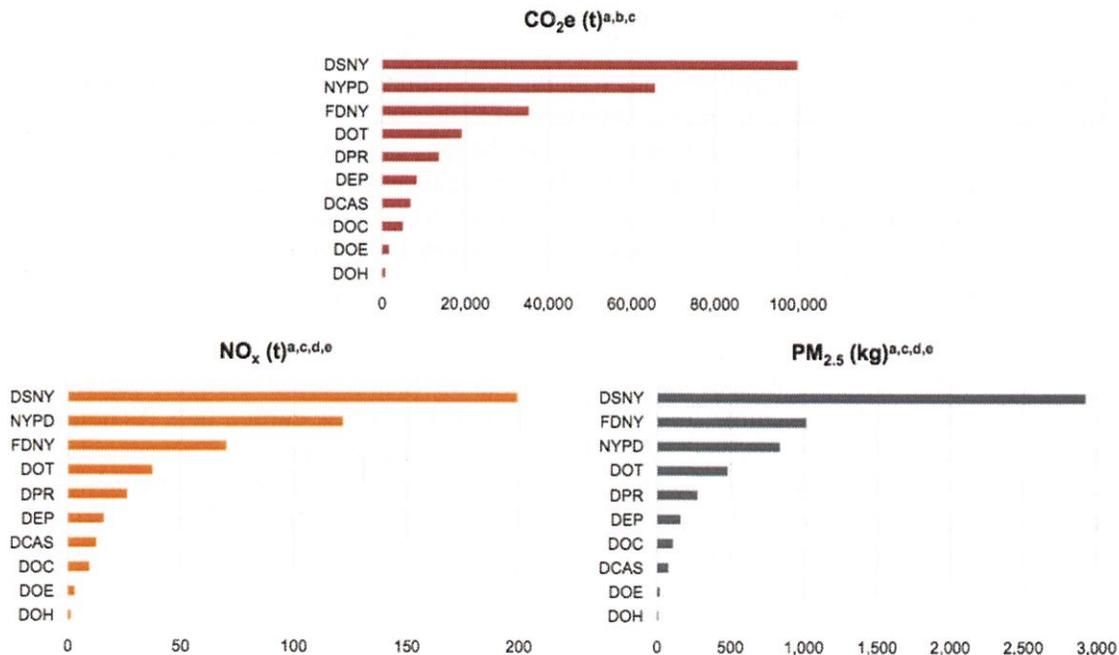
There are approximately 10,000 diesel vehicles in the City fleets, but it is the roughly 6,300 heavy-duty vehicles that demand the most attention. As illustrated in the tables below, the Department of Sanitation, with the highest number of heavy-duty vehicles, also has the highest diesel consumption (in the form of biodiesel) and accounts for the highest levels of health-threatening emissions—including of PM and NOx—despite the Agency’s widespread use of advanced emissions control systems. This clearly demonstrates a correlation between the emissions reductions that the City seeks to achieve in its 80x35 goal and the primary role played by the heaviest duty vehicles within agency fleets. Without action on these vehicles specifically, reaching the 80x35 target simply isn’t realistic.

*Heavy-Duty Vehicles, Diesel Consumption and Emissions by NYC Agencies, 2017**

CITY AGENCY	FY 17 actual count of heavy duty vehicles	FY 17 total diesel consumption, gallons	Total estimated CO2e emissions, metric tons	As % of total emissions for these fleets	As % of required emission reduction (198,000 metric tons)
Dept. of Sanitation (DSNY)	3,808	10,198,985	103,381	63.05%	52.21%
Fire Dept. of NY (FDNY)	221	2,736,267	27,736	16.91%	14.01%
Dept. of Transportation (DOT)	864	1,173,303	11,893	7.25%	6.01%
Dept. of Parks & Rec. (DPR)	354	657,500	6,665	4.06%	3.37%
NY Police Dept. (NYPD)	440	508,524	5,155	3.14%	2.60%
Dept. of Env. Protection (DEP)	439	395,086	4,005	2.44%	2.02%
Dept. of Corrections (DOC)	194	324,386	3,288	2.01%	1.66%
Dept. of Education (DOE)	24	183,003	1,855	1.13%	0.94%
TOTAL	6,344	16,177,054	163,977	100.00%	82.82%

*Heavy-duty vehicle numbers and agency diesel consumption taken from the *Mayor’s Management Report*, September 2017; emissions values based on 22.3 lbs. CO2e per gallon diesel, per *Inventory of NYC Greenhouse Gas Emissions in 2015*, April 2017. The *Mayor’s Management Report* refers to all diesel as “biodiesel,” since City agencies have a minimum 5% blend requirement.

Vehicle Air Emissions (CO2e, NOx, PM) by City Agency in FY 2015¹³



Deploying Biomethane: A Cost-Effective GHG Reduction Strategy for New York City

The table below shows examples of the greenhouse gas reductions achieved by converting 1,000, 3,800 or 5,667 trucks from diesel to biomethane (assuming a modest average per-vehicle GHG reduction of 80% compared to diesel and biodiesel blends).

GHG Reduction in Heavy Duty Trucks: Three Scenarios Replacing Diesel with Biomethane

Scenario 1	Number Trucks	Diesel Displacement (gallons/year)	GHG Reduction (MT CO ₂ e)	% Reduction (biomethane only)	% Reduction (Biomethane + Whole Fleet)
	1,000	3,000,000	24,327.27	12.29%	45%

Scenario 2	Number Trucks	Diesel Displacement (gallons/year)	GHG Reduction (MT CO ₂ e)	% Reduction (biomethane only)	% Reduction (Biomethane + Whole Fleet)
	3,800	11,400,000	92,443.64	46.69%	80%

Scenario 3	Number Trucks	Diesel Displacement (gallons/year)	GHG Reduction (MT CO ₂ e)	% Reduction (biomethane only)	% Reduction (Biomethane + Whole Fleet)
	5,667	17,001,000	137,862.65	69.63%	103%

*For the purposes of this example, all scenarios assume 10 gallons of diesel fuel consumed per vehicle per day; 22.3 pounds of GHG emissions per gallon of diesel, per the City's 2015 Greenhouse Gas Inventory; 2,200 lbs. to the metric ton; an 80% reduction of emissions relative to diesel from using biomethane; and vehicles on the road 300 days per year.

With all the environmental and public health benefits of replacing diesel trucks with those powered by CNG or biomethane, a critical question becomes: is such a shift economically feasible? The City has indicated that it plans to commit up to \$6 billion for fleet sustainability measures over 20 years.¹⁴ And the good news is that the additional costs of buying trucks with Near Zero engines (about \$50,000 more per vehicle) and of properly ventilating indoor depots (approximately \$400,000 each) represents just a fraction of this amount.

For example, replacing 3,800 heavy-duty diesel vehicles with models running on biomethane (Scenario 2, above) would meet the City's 80x35 goal, at an incremental cost of \$190,000,000 spread out over 10-12 years, depending on each agency's vehicle replacement cycle. (In the case of the DSNY fleet, complete replacement could take place over 7 years, the accepted standard for vehicle replacement in that fleet since the 1980s.) In addition to distributing the costs over time, a multi-year transition would be appropriate to allow maintenance teams to become acquainted with new systems, vendors to align their operations with new city requirements, etc.

Furthermore, over the long-term the City will also likely be able to have *its own waste-streams used to produce biomethane fuel*, which has additional economic benefits. In addition to the biomethane currently produced at Fresh Kills landfill, NYC has ample supplies to produce this ultra-low-carbon fuel. As noted above, the 1.2 million tons of food waste generated by the city's residents and businesses, if processed in anaerobic digesters (including at Newtown Creek and a handful of private facilities under development in the region) could produce enough biomethane to displace ALL of the 17.6 million gallons of diesel fuel¹⁵ consumed by the city's heavy-duty vehicles. But the City has 13 other wastewater treatment plants whose biogases could also be used to produce biomethane.¹⁶

Developing and utilizing our local biomethane resource could save the City millions of dollars on fleet fuel, help address its own goal of zero waste to landfills by 2030, and provide revenue from sales of both renewable natural gas and the valuable soil amendments composed of organic waste “biosolids” left after the digestion process.

Aligning the City’s Procurement Practices with Stated Climate and Clean Air Goals

The City deserves credit for the progress made toward its *Clean Fleet* (80x35) and *OneNYC* clean air goals. Shifts of light-duty vehicles to electric models and integration of biodiesel blends fleet-wide have reduced emissions considerably, but reaching and exceeding these goals requires a major shift away from diesel fuel not yet acknowledged or embraced in the 2015 *Clean Fleet* plan. Fortunately, as described above, there are proven technologies that can get us there, and clear indicators of how to prioritize their application. Getting there, however, will require swift action.

While the City intends to pursue divestment from fossil fuel companies in its pension funds, its annual budget dedicates hundreds of millions of dollars to the procurement of diesel fuel and vehicles. The Department of Sanitation alone commits between \$50 and \$100 million each year to facility upgrades and construction. Using some of these funds to deploy proven, cost-effective non-diesel alternatives is an immediate and direct way for the City to use its buying power to drive fleet sustainability and clean air.

The City Council is now in a position to take action to align fleet purchasing with the City’s climate and clean air goals, by calling for phasing out the purchase of diesel vehicles in favor of zero and near-zero emission technologies that are available now.

Such moves are not unprecedented; London has banned the use of diesel fuel in municipal fleets, with a direct link to vehicle replacement as the most logical time to initiate this transition. Other cities across the world — from Oslo and Rome to Beijing and Shanghai — have passed legislation restricting the use of diesel vehicles, citing the fuel’s negative impacts on air quality and climate.¹⁷ As the largest city in the country, and one of the wealthiest on the planet, New York has the responsibility and wherewithal to achieve its climate and clean air goals. Leadership and action on fleet procurement and introduction of zero and near-zero emission options would put our city on the path to the scale of change that assures progress toward a sustainable future for all New Yorkers.

Sources

¹ *NYC Clean Fleet*, December 2015. Target of 57,000 MT of emissions based on 2005 baseline of 285,000 MT. <http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/NYC%20Clean%20Fleet.pdf>.

² *Ibid.*

³ *Inventory of NYC Greenhouse Gas Emissions in 2015*, April 2017. http://www.dec.ny.gov/docs/administration_pdf/nycghg.pdf

⁴ *Ibid.*

⁵ *NYC Clean Fleet* and the *NYC Greenhouse Gas Emissions Inventory* do not quite agree on fleet emissions. According to *Clean Fleet*, the total is 255,000MT; according to the *Inventory*, gasoline and diesel fuel combined account for 260,000MT.

⁶ *Fleet Management Manual*, pg. 19.

⁷ Tom Quimby, “UPS, NYC: Renewable diesel facing availability issue.” *Hard Working Trucks*, 5/9/16, <https://www.hardworkingtrucks.com/ups-nyc-renewable-diesel-facing-availability-issue/>

⁸ Mark Boada, “Managers of Work Truck Fleets: Is Renewable Diesel in Your Future?” *Fleet Management Weekly*, <http://www.fleetmanagementweekly.com/managers-work-truck-fleets-renewable-diesel-future/>

⁹Boada, op. cit.

¹¹ https://www.afdc.energy.gov/uploads/publication/waste_to_fuel.pdf

¹² New York City Community Air Survey, 2008-2015, April 2017. <https://www1.nyc.gov/assets/doh/downloads/pdf/environmental/comm-air-survey-08-15.pdf>

¹³ DCAS Clean Fleet RFI, 2015

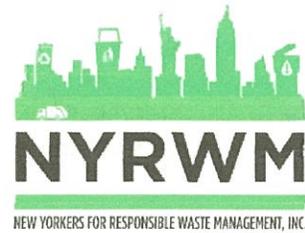
¹⁴ *Ibid.*

¹⁵ Based on 19 diesel gallon equivalents per ton of food waste achieved at a combined anaerobic digester/CNG fueling facility in Sacramento, California.

¹⁶ DSNY presentation on commercial food waste.

¹⁷ <http://www.dw.com/en/move-is-on-to-ban-diesel-cars-from-cities/a-42747043>

Testimony to the
Joint Hearing on the Mayor's Preliminary
Budget for FY2018
by the
Committees on Sanitation and Solid Waste
Management and Finance
Council of the City of New York



Wednesday, March 14, 2018 – City Hall

Good afternoon, Chairperson Reynoso and Members of the Committee. My name is Kendall Christiansen; I am Executive Director of **New Yorkers for Responsible Waste Management**, a trade association comprised of nearly twenty companies that provide waste and recycling management services for New York City's commercial and industrial businesses, as well as the Department of Sanitation, and many more that provide products and services to our members.

NYRWM is not just supported by the commercial waste industry, but increasingly is in a broad partnership with the city's business community – from local Chambers of Commerce to citywide trade associations – and an important segment of the city's labor unions, all of whom share deep concerns about the direction of the Administration with respect to the management of waste, recyclables and organics generated by the city's businesses.

First, welcome to this Committee; in one capacity or another, I have appeared before and worked with this Committee's predecessors since the early 1990's – having served initially as the founding Assistant Director of DSNY's recycling system (circa 1989) and later as Chair of the Citywide Recycling Advisory Board, a creature of the City's mandatory recycling law – that should be re-started by this Council and Committee.

I also have worked in and around the city's commercial waste sector, as well as across the US and in Canada, and therefore bring a broad and deep perspective to the issues and opportunities before New York City and this Committee.

This Committee should know that waste-related matters are a key part of the Council's legacy as an institution: the 1989 Mandatory Recycling Law was the first major program initiated by the Council following Charter Reform, and it aggressively defended Local Law 19 in various litigation against Mayors not fully committed to its successful implementation. The Council strengthened its role on these topics by adoption of the City's first Comprehensive Solid Waste Management Plan in 1992, insisting that it could not be advanced for state review without the Council's approval. The 2006 CSWMP also bears the Council's direct imprint.

And the adoption of the 1996 Trade Waste Act – while initiated by Mayor Giuliani – also bears the Council's voice.

Those historical references are, in fact, essential background for today's hearing regarding both the Business Integrity Commission and the Department of Sanitation.

I wish to make two points about each.

First, regarding the BIC: than twenty years have passed since the city initiated massive reforms related to commercial waste, and much has changed, to put it mildly. The commercial waste sector is now highly regulated and professionalized – more so than in any other city. The city's most recent assessment of the sector's performance, published in 2016, found that the sector is significantly consolidated (20 companies provide more than 80% of the total market); and provides efficient and reliable services with a high level of customer satisfaction.

It also is an essential service provider to the city itself – which only collects but does not process or market or manage disposal of the more than 24,000 tons of waste generated daily by the city overall (split nearly 50/50 between the two sectors), making possible the city's comprehensive recycling and organics diversion systems.

Now is the time to dramatically update and modernize BIC's regulation of the industry, and provide it with the necessary resources and incentives to do so. A new generation of regulations should recognize and codify the higher standards of performance which most of the companies provide while also limiting BIC's sometimes counter-productive "police powers" over the industry, which should now become an historical artifact. BIC is an important partner with the industry in a renewed focus on safety – going well beyond VisionZero – and in figuring out how best to implement the city's expanded recycling and organics diversion initiatives in the commercial sector, make the transition to clean-emission trucks, install side-guards, and other important operational challenges.

But at times it's old-style prosecutorial style works against the city's 21st century needs for innovation, partnership and continuous improvement.

Second, with respect to the BIC's budget, \$1 million. The Council should understand BIC's limited capacity for efficient and timely data analysis. Using its regulatory powers, BIC accumulates a massive amount of data, but lacks the staff capacity to do much more than collect it. Safety is a prime example: the so-called "data" allowed to inform public discussion is highly flawed, out-of-date, and is improperly used solely to make political points, not to reward improvements and support new initiatives.

Another example is the out-moded “rate-cap” system; once necessary, it now works against the city’s interests – with BIC having essentially no in-house capacity for analysis of the industry’s operating economics, especially with respect to valuing the impact of expanded recycling and organics diversion practices, greatly complicated by challenges in the global markets.

While the BIC deserves considerable credit for pursuing a new approach, \$1 million for support of these activities would be money well-spent.

That limitation relates to my **first comment regarding DSNY** – its aspirational role with respect to the commercial waste system, a relatively new-found interest of just the past couple of years when for decades DSNY largely focused on its own operations and needs, and ignored commercial waste and recycling. Except, of course, for providing processing and transfer services when Fresh Kills was closed and the city had no disposal options of its own. And even now, private companies manage the transport of containers filled with waste at the new marine transfer stations. We also provide comprehensive processing services for recyclables and organics, both those collected by DSNY and by private firms from the commercial sector.

In 2016, DSNY unilaterally decided that it would undertake a massive restructuring of the commercial waste sector; using a single set of studies, and without a minutes worth of public dialogue or debate, it announced that the open-market system would be replaced by a system of geographic zones serviced by a single service provider with an exclusive franchise – it cited the single metric of reducing vehicle miles traveled, along with empty rhetoric about improving recycling, quality of life, and safety.

Unfortunately, for their own political agenda, some have opted to continuously demonize the industry rather than to engage it on its own terms – failing to realize that most companies are locally-owned, span multiple generations, are passionate about the reliable and innovative services they provide under the most challenging of circumstances, and provide good-paying jobs for thousands of hard-working New Yorkers. Most of the industry’s employees are people of color, and many have needed a second- and third-chance to prove themselves as valuable members of society.

In fact, most of the industry’s workforce is unionized, and lives in the neighborhood around the businesses where they work. In most instances, these jobs pay two to three times the minimum wage and can lead to a career path in which a person could go from being an entry-level worker to a driver or supervisor with jobs that pay on average, \$70,000 per year. While some choose to be more itinerant, many of our employees work in the industry for decades.

My second DSNY point is that as a budget matter - \$8 million. This Committee should be aware that in FY2017 DSNY awarded a contract totaling \$8 million to support this flawed idea and figure out how to make it work for NYC – in large part because DSNY itself has no in-house expertise or capacity to do that work. Although DSNY convened a 35-member advisory board, it cautioned participants not to challenge the very idea of zoning and franchising – asking only for ideas about how to implement it. Already seven months into the process of figuring out the

new math of zones, DSNY recently agreed that using fresh data would be a good idea – rather than relying on outdated, incomplete and flawed data from 2014.

Fortunately, this Council and the city’s business community has a real-world example to examine so as to assess the concept of zoning and franchising, which has never before gained traction in NYC: just last year, Los Angeles began implementing its version of zones – it created eleven, and found only seven companies to service them, and awarded exclusive long-term contracts for the privilege.

Since last July, LA’s business and civic community has been rocked by the implementation of RecycLA – on the service side, in just a few months it logged nearly 30,000 service complaints; city staffers had to be placed in Councilmembers offices to field complaint calls; and its 311-system overwhelmed.

On the price side, LA’s business community expected modest increases of 30% to 40%, but suffered massive sticker-shock with bills that doubled, tripled and quadrupled previous costs – not to mention unexpected charges for “special services.”

The political uproar has been deafening, heard all the way across the U.S.: multiple editorials have screamed at the Mayor and Council for having chosen unwisely – it could have achieved the same goals AND preserved the open-market system; massive resistance by the business community at all levels; and Councilmembers now calling for unwinding the zone/franchise system.

As you consider the Department of Sanitation’s budget request for FY2019, the Council should aggressively exercise its oversight of what the NY Post called “a lunatic idea,” and instruct the Administration to pursue a different course of action – modernizing the BIC and entrusting it to collaborate with the industry in such ways that would achieve the city’s stated goals sooner, better and cheaper than waiting five more years for an unwise plan to be implemented.

While DSNY may claim that it can learn from the RecycLA debacle, in simple terms NYC’s current open-market system isn’t broken – it daily meets the city’s core objectives of keeping the city clean, customers well-served and prices competitive, with expanding commitments to diversion of recyclables and organics.

No evidence has been produced to suggest that zones and franchises are the only method by which the current system can be improved. In fact, evidence from other cities suggests that higher prices are the inevitable consequence of a franchising system, with some cities using franchise fees primarily to raise revenues (in LA, \$35 million annually). In NYC, customers are free to negotiate services and rates, essential and effective features that will be lost after the city spends this \$8 million to restructure the commercial waste system.

A better suggestion: \$8 million could be used to fund collaborative projects with the industry that immediately address the city's newly-adopted environmental objectives, including zero waste by 2030 and reducing greenhouse gas emissions by 80% by 2050.

A final comment, less about budget than about process: both BIC and DSNY could benefit from improved capacity to practice collaboration and partnership vs. arbitrary and unilateral imposition of regulations. This is one big complicated city, way too complex for a purely top-down regulatory approach to work effectively with those entrusted for on-the-ground services in the field. As the industry's representative, I can cite too many examples to include in this testimony, but welcome further discussion.

On behalf of New Yorkers for Responsible Waste Management, we look forward to working with the Council to consider an alternate path to continuous improvement of the commercial waste system that will achieve the city's goals without destroying competition and effective services, forcing small companies out of business, and risking hundreds of good working-class jobs.

The locally-owned companies that already provide the city with highly effective and efficient waste-managed related services deserve better than what DSNY is currently proposing. The businesses that rely on the industry's services expect better, too.

And in the process, the Council can direct \$8 million for better purposes – including \$1M to the BIC that would support immediate projects to improve the commercial waste industry.

Thank you for your consideration.

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Daniel D. Brownell
Commissioner and Chair

**Testimony of Commissioner Daniel D. Brownell of
the New York City Business Integrity Commission before
the Committee on Sanitation and Solid Waste Management of
the New York City Council on the Fiscal Year 2019 Preliminary
Budget, the Preliminary Capital Plan for Fiscal Years 2019-2022, and
the Fiscal 2018 Preliminary Mayor's Management Report**

March 14, 2018

Good afternoon, Chair Reynoso and members of the City Council's Sanitation and Solid Waste Management Committee. I am Dan Brownell, Commissioner and Chair of the New York City Business Integrity Commission, or BIC. Joining me today are Deputy Commissioner of Legal Affairs and General Counsel Noah Genel and Assistant Commissioner of Finance and Administration Cindy Haskins. Seated just behind us is BIC's Director of Policy Salvador Arrona. Thank you for inviting us to testify today.

The Role of the Business Integrity Commission

For the Council members new to this committee, I will start by giving you some background information about BIC. Because we are a small agency with a relatively narrow focus, people are often not familiar with us. We are both a law enforcement and a regulatory agency, currently with a total of 83 employees, and one hire in process. Of that total headcount, 10 are investigators, many of whom are retired NYPD detectives. We also have a squad of detectives from the NYPD's Criminal Enterprise Investigations unit, who work on criminal investigations.

BIC was originally formed as the Trade Waste Commission, created more than 20 years ago to oversee the commercial garbage hauling – or trade waste – industry, which had been corrupted and controlled by organized crime for decades. Soon after, City Council added oversight of the public wholesale food markets to our duties, and our name changed to the Business Integrity Commission. We play a unique role in City government as we work to regulate and improve these once-troubled industries. In fact, there is no other agency like BIC anywhere in the country.

The main component of BIC's oversight is our comprehensive background check process, consisting of thorough investigations into the owners, key employees and financial structures of our applicants. We seek to ensure that those companies are not operated by, or financially connected to, organized crime or other corrupt influences. After over two decades of BIC regulation, these industries are now far better than they were. As a result, we have been able to evolve beyond our traditional role of eliminating corruption to address new challenges in the industries we oversee.

Safety in the Trade Waste Industry

Collecting and hauling trade waste, particularly in New York City, is a dangerous and difficult job. The collection trucks are big and heavy, and there are many other vehicles, along with cyclists and pedestrians, rushing to get around in a limited amount of space. That is why this Administration has made safety in the industry and on the streets a priority. Since being appointed Commissioner four years ago, I established a monthly Trade Waste Advisory Board meeting with members of management of several companies and other industry representatives to discuss important issues relevant to trade waste and BIC's oversight. We have also increased

our discussions with other industry stakeholders, such as advocates. Communication is key to effective regulation.

In 2016, we joined the City's Vision Zero Task Force, to help eliminate traffic-related deaths in the City. This group is made up of some of the best and brightest from City agencies like DOT, the Department of Citywide Administrative Services, the NYPD, TLC, the MTA and others. Our membership on the Task Force has greatly enhanced our ability to gather key safety-related data that we never had in the past. As part of our work on the Task Force, we are establishing a panel to review serious crashes involving trade waste vehicles. The panel will consist of members of agencies on the Vision Zero Task Force and will allow us to analyze past crashes in an effort to prevent them in the future. We expect this panel to begin work in the near future.

Recently, we have focused on how to ensure that all trade waste companies operating in the City have written and comprehensive safety protocols. On February 20, 2018, the Commercial Waste Zone Collection Safety Group, headed by BIC and the New York City Department of Sanitation, released the Trade Waste Safety Manual. We have provided all of you with a copy as part of today's testimony. The Manual is the culmination of 15 months of group work, generated by carters, safety and environmental advocates, and organized labor, specifically Locals 813 and 108. It is now available on BIC's website at http://www1.nyc.gov/assets/bic/downloads/pdf/safety/bic_safety_manual_022018_final.pdf.

The next step for the Safety Group is to produce videos that expand on key topics in the Manual, a project already well under way. The Vision Zero Task Force has been helping us with this process. All carters will be able to use the videos to educate their workers and managers. As an example, there will be a video that takes drivers through the pre-trip inspection of their trucks

and other equipment, which they should be conducting at the start of every shift. The inspection includes the completion of a daily Driver Vehicle Inspection Report, a sample of which is included with the Manual.

There are other safety-related concerns that the Commission is seeking to address. Perhaps most importantly, we want to address the problem of speeding and other traffic law violations by trade waste trucks. We have found those problems to be rooted in larger management-related issues, such as overloading collection routes so that drivers and helpers have to rush to finish them in time. We intend to create additional rules and potential legislation to address trade waste industry safety concerns in the near future. I hope to work with you, Chair Reynoso, and the rest of the committee on navigating these critical issues.

BIC and Trade Waste Industry Workers

As part of BIC's increased work in trade waste safety, we have increased our communications with trade waste workers – particularly drivers and helpers – and organized labor. Teamsters Local 813 and Laborers' Union Local 108 have been particularly helpful in our efforts to reach out to workers. Our discussions have reinforced just how difficult the job of being a driver or a helper is. Of course, we knew that the physical work is back-breaking. But, far worse is that drivers' and helpers' hours are often too long, and, as a general matter, the workers are not properly compensated. In some cases, the treatment of industry workers is flatly abusive. Poor conditions for drivers and helpers is not only unfair and unhealthy for them, but also result in dangerous conditions for everyone on the City's streets.

I am committed to continuing to foster our relationship with organized labor, and both union and non-union trade waste workers. Understanding their jobs and the challenges they face is an important component to making the industry safer, as well as the City as a whole.

BIC's PMMR Data

Turning to other issues at BIC, we are continuing to decrease the time it takes to process both trade waste and public wholesale market applications. We have made additional process adjustments, such as prioritizing new applicants – allowing them to enter the marketplace without undue delay – and the resulting improvements are now evident. In the first four months of fiscal year 2018 compared to the same period of fiscal year 2017, BIC has reduced the average time to approve a waste hauling application by 45% and a market application by 28%. Additionally, during the same periods, the average age of a pending trade waste hauling application declined by 42% and a market application declined by 25%.

When I first appeared before you four years ago, these numbers were poor. I am happy to say that we have turned it around and will continue to improve. In the process, we have also simplified our application and are moving toward an online application and submission process. Chair Reynoso and members of the committee, when we are ready, I will invite you to BIC so we can run through an online application with you to show you the improvements.

In the area of BIC enforcement, we are finding a significant decrease in unlicensed carter activity in the City. We have issued 53% fewer of those violations compared to a year ago, which I attribute to higher compliance rates. Be assured that we have not decreased our attention to such violations. In fact, stopping companies from operating illegally is at the core of what we do. While the number of violations issued in the past year to market businesses has remained constant, I remind the Council that soon after I started at BIC, we focused more on resolving challenges and problems there, rather than simply issuing violations. As a result, violations issued in the markets have been relatively low for the last three years.

Along with the PMMR data, BIC is working on a number of projects that require data analysis. One such project involves enforcement of Local Law 145 of 2013, which requires all heavy duty trade waste vehicles to comply with 2007 EPA standards for engine emissions by January 1, 2020. To assist in these important data-driven projects, we hired a data analyst to provide routine analytical data support to our various units. This role is crucial as we continue to modernize BIC and recognizes the essential role that data plays in our law enforcement and regulatory functions.

Commercial Recycling Enforcement

Enforcement of the commercial recycling waste collection rules began on August 1, 2017. Under those rules, it is illegal for private carters to mix putrescible waste with source-separated recyclable materials in the same truck compartment. BIC is committed to ensuring private carters comply with the law, and we have investigators actively pursuing violations of the commercial recycling rules. To date, BIC has issued 34 violations to 16 different companies. These violations come with hefty fines, which is reflective of the seriousness of the violations. Thus far, none of these violations have gone to a hearing, which reflects the strength of the evidence supporting the violations we are issuing.

Our own investigators are working hard to catch these violations, but we also strongly encourage the public to help our efforts by submitting tips. To this end, BIC has updated the complaint section of our website to make it easier to submit complaints online. Users can now upload pictures and videos as part of their complaint. When the public sees a private carter breaking the rules or creating unsafe conditions, if they can do so safely, they should take pictures or videos and provide them to us. They can remain anonymous, but if they give us their contact information, we will let them know what develops from their tip. I think that those who

have given us tips already will agree that we do a good job of taking action on the tips and updating those who provided the information.

Regulation of the Heating Oil Industry

I now want to touch on an industry that we do not regulate, but that is highly troubled and in need of oversight: the heating oil supply industry in New York City. Since November 2015, when the Manhattan District Attorney announced the indictments of 9 heating oil companies and 44 of their owners and drivers, nothing has been done to curb the fraud in the industry. Heating oil consumers throughout the City – including schools, religious institutions, hospitals, police precincts, and courthouses, to name a few – are losing tens of millions of dollars each year to theft. This has been going on for at least the last 30 years. As you know, there is a bill pending before the Council – now known as Intro. No. 259 after being re-introduced from last term – that would make BIC the regulator for the industry, much in the same way we regulate the trade waste industry. We hope to work with the Council to pass this important measure this term.

Conclusion

In closing, I want to turn back to safety in the trade waste industry. While out early in the morning walking my dogs, I have seen private garbage trucks operating in an unsafe manner. I am sure many of you have seen it too. There is no doubt that driving garbage trucks in the City is difficult and dangerous. But unsafe driving simply must stop. And management must stop overloading collection routes so that they are impossible to complete without rushing. Safety must become the number one priority, where *everyone* in the company has a stake in the outcome.

Thank you for your interest in our work at BIC. We look forward to answering your questions.

Trade Waste Safety Manual



Introduction

To All Trade Waste Companies:

The mission of the City of New York Business Integrity Commission (BIC) has expanded since its creation 22 years ago. While our primary mission continues to be to remove and keep out any form of corruption from the industries we regulate, our focus has expanded to include safety in the trade waste industry.

It is my pleasure to release the “Trade Waste Safety Manual,” a guide that every private carting company in the city, both large and small, can use as a starting point to develop its own robust safety program. To provide you with some context for the creation of the manual, BIC is an integral member of the City’s Commercial Waste Zone Advisory Board and the Mayor’s Vision Zero Task Force. In September 2016, the New York City Department of Sanitation (DSNY) and BIC brought together a diverse group of stakeholders to begin the conversation about developing a commercial waste zone collection plan. During that meeting, one thing everyone agreed on was that making the trade waste industry safer for all New Yorkers was an effort that could and should begin immediately. To that end, BIC and DSNY formed the Commercial Waste Zone Collection Safety Working Group (Working Group), and invited everyone from that initial stakeholder meeting to participate. In addition to members of City government, the group includes members of the trade waste industry, union leaders, and environmental and traffic safety advocates. I would like to thank all the members of the Working Group for their assistance and expertise during the development of the manual.

Safety is everyone’s issue. We appreciate all of your efforts to make the trade waste industry safer. This manual is only the first step. With your help, BIC will continue to develop training materials and increase oversight. Together, we can help the City achieve its Vision Zero goal of ending traffic-related deaths and injuries in New York City.



Daniel D. Brownell
Commissioner and Chair



DEVELOPING YOUR SAFETY TRAINING PROGRAM

Who, What, Where, and How

Welcome to the Trade Waste Safety Manual! Think of this manual as an outline of important safety topics that you can use as a starting point to develop your own safety program at your company. It covers important laws and rules, as well as industry best practices. However, the manual's purpose is not to provide legal advice or to be a comprehensive guide to all the laws and rules that are applicable to trade waste companies operating in NYC. You should develop your own safety policies and programming based on your company's operations.

Q: Who do I provide safety training to?

A: All of your workers – supervisors, drivers, mechanics, and helpers alike. Drivers and helpers work as a team and, if qualified, may on occasion need to step into the other's role on short notice. Prepare your workers to operate safely in both roles.

Q: What topics do I cover in a safety training program?

A: Think about your operations step by step – from the moment your workers arrive for their shifts until they go home. The Safety Manual is great place to start. It covers essential safety topics like personal protective equipment, proper lifting, collision avoidance, and safe hopper operation.

Q: Where is the best setting to conduct safety trainings?

A: Provide a combination of “classroom” and hands-on training. For example, you may want to talk through proper lifting procedures with a hand-out, but then ask your workers to demonstrate what they learned.

Introduction

Q: When should my company provide safety training to its workers?

A: Frequently! Create a culture of safety. Make safety part of “how we do things here.” Have monthly or weekly safety meetings with your team. Additionally, there are many other times you should train your staff. For example:

- **When your company hires a new worker.**
- **When a worker takes on a new role or responsibility.**
- **When a worker returns from a leave of absence.**
- **When your company buys new equipment, controls, or other technology.**
- **After a worker is involved in a “near miss” collision.**
- **After a worker is involved in a collision or other serious safety infraction.**

Q: How do I create an effective training program?

A: This manual is a great place to start. Here are some things to consider when building an effective safety training program:

- **Commit to Safety**
Owners’ and supervisors’ behavior should reflect that safety is a priority and an integral part of how the company operates.
- **Reward Safe Behavior**
Acknowledge your workers knowledge and skill by giving praise to workers who have a clean safety record.
- **Keep Communication Respectful**
Supervisors should coach workers how to improve by providing constructive criticism, not put-downs. Clear guidance and examples are helpful ways to do this.
- **Make training engaging**

Use visuals and have hands-on components to the trainings. Make your training sessions fun – after you go over a section, take a group quiz or have a discussion where your employees tell stories of their experiences. If you have cameras on your trucks, use footage to learn from real-life situations and start discussions.





1.

Safe Start to the Day

1.

WORKER READINESS

Rest: Because most commercial refuse and recycling collection happens late at night to early morning, during the body's natural sleep period, drivers have an increased risk of being drowsy. Drowsy driving can slow reaction time and impair judgment not unlike using drugs or alcohol.

- *Help your drivers plan to get seven to eight hours of sleep before driving their shift.*
- *Host a free or low-cost sleep apnea screening.*
- *For more information on drowsy driving visit: www.cdc.gov/sleep/about_sleep*

Important note: If your drivers operate trucks with a gross weight of 10,001 or more pounds, Federal and New York State regulations limit when and how long your drivers may operate those trucks. Know the rules. Visit the U.S. Dept. of Transportation's Federal Motor Carrier Safety Administration's (FMCSA) website, www.fmcsa.dot.gov, and the New York State Dept. of Transportation's (NYS DOT) website at www.dot.ny.gov.

Medication: Drivers taking medication must check with a doctor to ensure the medication will not impair their ability to operate heavy machinery.¹ If the medication has side effects, like drowsiness, it is not safe to operate the truck as either a driver or a helper.

- *Both drivers and helpers should report all medications, both over-the-counter and prescriptions, to their supervisors.*

Drugs and Alcohol: Illegal drugs and alcohol should be banned from the workplace. Under no circumstances should drivers operate trucks while under the influence of drugs or alcohol. Most importantly, FMCSA and NYS DOT regulations prohibit commercial vehicle drivers from consuming any alcohol within four hours of the beginning of their shift.²

For alcohol and substance abuse prevention, treatment, and recovery resources visit: www.oasas.ny.gov.

HAZARDS IN THE TRADE WASTE INDUSTRY

Train your staff to know the hazards they may face while working in the trade waste industry and how to reduce the risk of injury.

Identify these potential hazards for workers:

- *Lifting heavy or sharp objects.*
- *Exposure to blood borne pathogens, sewage, and hazardous chemicals.*
- *Extreme temperatures.*
- *Working in low visibility conditions near heavy traffic.*
- *Working with heavy equipment and hydraulics.*

Discuss ways to prevent workplace accidents and injuries, and stress the importance of the use of proper equipment.

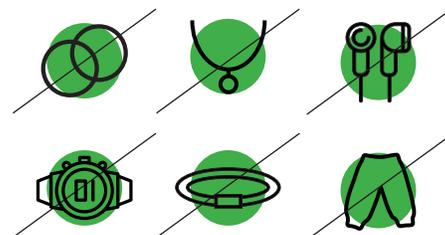
PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) is essential safety equipment. PPE includes apparel such as reflective vests and other gear that is worn to reduce exposure to workplace hazards, such as low visibility at night.

PPE for drivers and helpers:

- *ANSI Class II reflective outerwear such as a reflective vest, shirt, or other outerwear.*
- *Pants or shorts secured with a belt.*
- *Puncture-liquid-resistant gloves such as nitrile coated cloth or leather palm gloves.*
- *Steel toe or composite boots that cover the ankle rising to at least 6 inches.*
- *Clear plastic goggles or a face shield.*

Do not accessorize



Rings, necklaces, headphones, watches, bracelets, and even loose clothing can increase the risk of injury and should not be worn on the collection route.

Make a good impression



Uniforms and PPE should be clean, shirts should be tucked in, and boots fully laced and tied. Your employees will not only look good, but will reduce the risk of injury. Consider providing the option for your employees to participate in a uniform washing service.

1.

Important Note: The Occupational Safety and Health Administration (OSHA) requires employers to assess workplace hazards and to provide PPE at no cost to employees. Employers are also required to train employees on the use and care of PPE.⁹ Drivers and helpers should not be permitted to begin their collection route unless they are wearing the appropriate PPE.

DVIR'S AND PRE-TRIP INSPECTIONS

At the beginning of every shift, the vehicle's driver is required to review the previous day's Driver Vehicle Inspection Report (DVIR) and then perform a pre-trip inspection.

What's a DVIR? Also known as a post-trip inspection, the DVIR is the record of the inspection of a vehicle at the end of a shift. The DVIR identifies any defects or deficiencies in any of the truck's parts or accessories. See page 32 for more information on DVIR.

If the DVIR does not list any defects	If DVIR lists defects
The driver must sign the DVIR certifying that he has reviewed it.	The driver should make sure the truck was repaired and that the DVIR was signed by a mechanic certifying that the repair was made or was not necessary.

After signing the previous day's DVIR, the driver can now begin the pre-trip inspection. This is required before every trip, even if the same driver completed the DVIR for the same vehicle at the end of the previous shift.

FMCSA and NYS DOT regulations require that drivers of a commercial motor vehicle with a gross weight of 10,001 pounds or more conduct a

pre-trip inspection to make sure the following parts and accessories are in good working order before the vehicle is put into service:⁴

- *Service brakes, including trailer brake connections.*
- *Parking/hand brake.*
- *Steering mechanism.*
- *Lighting devices and reflectors.*
- *Tires.*
- *Horn.*
- *Windshield wipers.*
- *Rear vision mirrors.*
- *Coupling devices.*
- *Wheels and rims.*
- *Emergency equipment.*

Safety Matters



Pre-trip inspections keep your employees and New Yorkers safe. It is designed to reduce crashes, injuries, and fatalities by identifying problems before the truck gets on the road.

If the driver does not find any defects	If the driver notes defects
<p>The truck is ready to be put into service and the driver can begin the collection route.</p>	<p>A mechanic must inspect the truck and complete the necessary repairs or certify the repairs are not necessary. If the vehicle cannot be repaired, it must be taken out of operation until the repair can be completed.</p>

Some Tips for Truck Inspection:

- *A sample DVIR is provided in the back which can also be used as a template to develop a pre-trip inspection.*
- *Make a binder for each truck's pre-trip inspection sheets and DVIRs and keep it in the truck.*
- *Help your workers develop a routine. They should conduct the pre-and post-trip inspections the same way each time.*

1.

FAQ

Q: I need to complete a collection route, but the only truck available has been put out of service. If it is a small matter, can I put a downed truck back into operation before the repair has been made?

A: No, never put completion of a route above driver and public safety. After discovering any safety defect that can affect the safe operation of a truck or result in a breakdown, you must down the truck and not put it back into operation until the repair is made. This is true even if the truck is needed to complete a collection route.

If at all possible, consider having a spare truck that can be put into operation if you need to down a truck. Also, encourage your drivers to identify and report any defects immediately. Fixing a problem early on can save you money, time, and lives.

Q: What are some examples of defects that affect the safe operation of a vehicle?

A: Anything from a small problem like a broken seat belt to the truck not starting will constitute the need to down the vehicle. Encourage vigilant reporting to avoid an unexpected repair.

Q: What should supervisors do while drivers are completing the pre-trip inspections?

A: Supervisors should make sure drivers properly complete their pre-trip inspections by monitoring the reports regularly. Supervisors should also perform spot checks before the trucks leave for the night and after the trucks get on the road. If the supervisor sees a driver skipping part of the pre-trip inspection, the supervisor should have a one-on-one conversation with the driver about how important a pre-trip inspection is to everyone's safety, including the driver's.

NOTES:

2.

On the Collection Route

2.

NEW YORK STATE TRAFFIC LAWS

All drivers must obey all NYS and NYC traffic laws. Here are some that should be emphasized in training sessions:

Seat belt use: All drivers and front seat passengers must wear their seat belts.⁵ There are no exceptions to this law! Please note: each truck must have a seatbelt for every member of the crew.

Cell phone use: NYS law prohibits using a cell phone while driving.⁶ For supervisors: consider banning cell phones from the route or requiring that they are kept in the glove box during the route. Studies show that even hands free cell phone use is distracting.⁷

No rear step riding: Helpers are not allowed to ride on the rear step of the truck on any public roadways.⁸



Did You Know? New York City employees are not allowed to use cell phones, even hands free, when driving.

BE SMART OUT THERE!

Train your drivers and helpers to prioritize the following tips:

- **Use the three point system:** Use three points of contact - two hands and one foot or one hand and two feet - when entering and exiting the cab of the truck.
- **Rock before you roll:** Utilize the mirror's full range of view by moving in your seat. Check the mirrors every 3-5 seconds while driving.
- **Don't get blocked:** Maximize your field of vision by keeping the dash clear. Check that hoodies or hats don't obstruct your vision. Do not wear headphones or Bluetooth devices; they can prevent you from hearing warning signals.
- **Public interaction:** Limit interactions with the public to respectful greetings. As you know, drivers stopped behind your collection truck get frustrated and may make angry or aggressive comments. Your best bet is to de-escalate the situation by not responding. If you are in danger, call your dispatch and 911.
- **See Something – Say Something:** As collection workers, you are in the same neighborhoods every day and know what is normal and what isn't. If you see something suspicious or discover weapons or hazardous materials, call 911 immediately.

Helpers' Role

The helper is the driver's second set of eyes. While in the cab, the helper should be scanning the road and alerting the driver of any obstacles.

Large trucks have been exploited by terrorists in ramming-style attacks. Use these tips to safeguard your equipment:

- Lock all doors when exiting the cab.
- Never leave keys unattended.
- Never leave a truck running when the driver is not in the driver's seat.

TOP TIPS TO AVOID COLLISIONS

Provide robust collision avoidance training to your employees that emphasizes urban driving. This training should cover defensive driving techniques and include sharing the road with cyclists and pedestrians. In addition, include these topics:

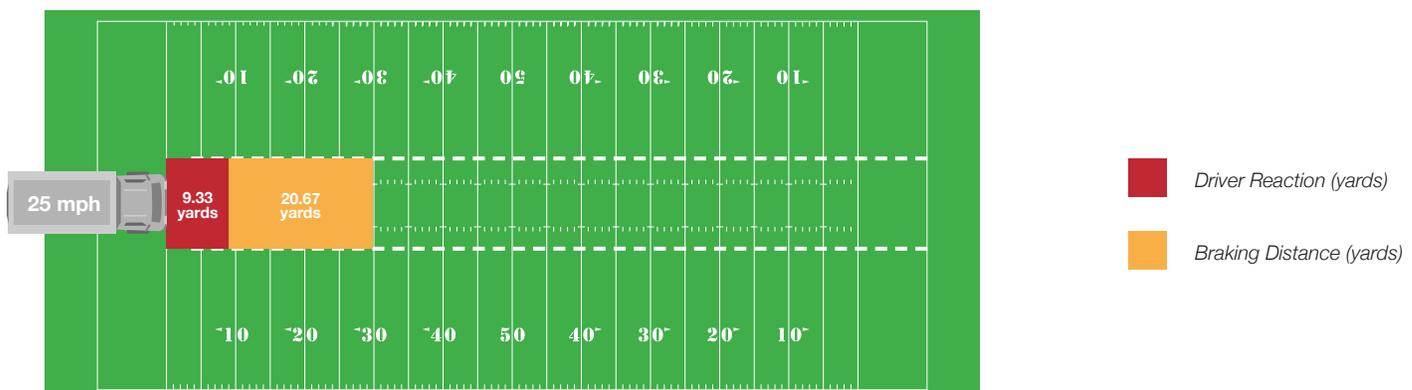
- **25 mph:** The speed limit on most NYC streets is 25 mph. As a larger, heavier truck, you must drive slowly to make it easier to stop and avoid collisions.
- **Use the six-second rule:** Keep a distance between you and the truck in front of you of SIX SECONDS when moving. Remember, the heavier the truck – the longer it will take to stop.
- **Consider the conditions:** Leave extra room between yourself and vehicles in front of you when the truck is full and when the roads are wet or icy. Be aware of strong winds.
- **Look on all sides:** Be aware of your surroundings and leave room for yourself to maneuver on the roadway.

Enroll your employees in a NYS DMV approved collision prevention course.



Find providers at: www.dmv.ny.gov/pirp/classroom

Stopping Distance At 25 mph



2.

Potential Hazards

- Pedestrians crossing mid-block.
- Cyclists riding parallel to trucks.
- Abrupt stops or turns by other vehicles.
- Sudden lane change by another driver, or drifting into your lane.
- Being tailgated.
- Getting boxed in.

Important Actions

- Continually scan mirrors and surroundings for pedestrians, cyclists, and approaching vehicles.
- Stay alert and observe other drivers' behavior.
- Stay in the right-hand lane.
- Stay centered in lane.
- Maintain a safe speed and following distance.
- Slow down to increase distance between you and vehicles in front or to avoid being boxed in.

In Heavy Traffic?

The most important space is in front of your truck. Give yourself at least 25 feet between you and the vehicle in front.

INTERSECTIONS AND TURNS

In NYC, a majority of fatal pedestrian crashes involving trade waste trucks have occurred in intersections. Your training program must emphasize safety at intersections. Here are some tips to include in your training:

- **If you are stopped:** *When the signal turns green, pause! Check your mirrors and scan the intersection for pedestrians, cyclists, and other trucks. Helpers should do the same.*
- **If you are driving through:** *Cover your brake. Never accelerate through an intersection. Both the driver and helper should check corners for pedestrians, cyclist and other trucks.*

Rock Before You Roll



Move forward, back, and side to side to utilize your full range of vision in your mirrors.

- **If you are turning:** *Prepare for each turn carefully.*
 1. Use your turn signal to indicate to others your intention.
 2. Slow down early.
 3. Expect pedestrians in the crosswalk.
 4. Check for cyclists as you approach the turn. Remember that a bicyclist traveling straight has the right-of-way.
 5. Turns must be made slowly – 5 mph is the recommended speed for all turns.

Left-hand turn tips	Right-hand turn tips
<ul style="list-style-type: none"> • Drive to center of intersection before starting the turn. • If there are two turn lanes, use the right-most turn lane. • Do not try to beat oncoming traffic. 	<ul style="list-style-type: none"> • Turn wide as you complete the turn, not as you start the turn.

BACKING UP

NYS traffic law states that no one should back up unless it is safe to do so and traffic will not be blocked.⁹ You should train your drivers to avoid backing up altogether. If they miss a collection stop, they should go around the block. Pedestrians have been struck and killed by trade waste trucks backing up.

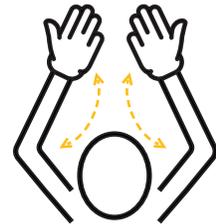
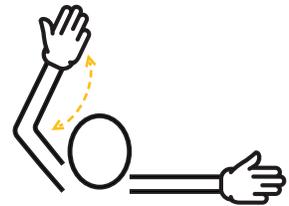
If your drivers find themselves in a position where they must back up, train them to do the following:

- *Never back up through an intersection for any reason.*
- *Never back up with someone on the rear step.*
- *If a helper is present, have the helper assist.*

2.

Backing up with a helper

- Review your hand signals.
 1. Stop = cross both arms above head.
 2. Turn = point one arm to indicate the direction to turn, bend other arm repeatedly towards head to indicate continued turning.
 3. Backward = raise arms with bent elbow so that fingers face the sky, bend both arms towards head and chest and then extend repeatedly.
- The helper should position himself at the rear of the truck and inspect the intended path.
- Wait until the helper is ready to direct your movement.
- The helper should establish and maintain eye contact with the driver, remain visible at all times, and immediately signal to the driver to stop if someone enters the truck's intended path.
- The driver should frequently check mirrors, and obey the helper's directions. Always back up slowly, and be ready to stop.



Backing up without a helper

- Exit your truck and conduct a visual inspection of the intended path.
- Back up slowly and avoid backing up towards the passenger side where there is increased obstructed vision.
- As you back up, frequently check all mirrors.
- If in doubt, stop and get out!

SAFETY EQUIPMENT FOR TRUCKS

Safety equipment technology and truck design can greatly improve public and worker safety. In addition to what is required by state and federal law, you may choose to incorporate additional equipment to improve the safety of your operations.

Industry Standard	Best Practices	Aspirational
<p>Industry standard items are those that are either required by law or industry leaders consider essential to safe operation.</p>	<p>Best Practices are items that industry leaders strongly recommend you incorporate in your operations.</p>	<p>Aspirational items are technologies that are worth exploring to find out how they can improve safety at your company.</p>
<ul style="list-style-type: none"> • All safety equipment required by the FMCSA and NYS laws and regulations¹⁰, including seat belts, cross-over and other mirrors, reflectors, headlights and other lamps, service and emergency brakes • Sideguards¹¹ • Emergency stop button • Audible back-up alert • LED hopper lights • Strobe lights • Reflective tape and logos • Hydraulic safety latches 	<ul style="list-style-type: none"> • Warning decals (e.g. Slow Down to Get Around) • Bottom of hopper painted with reflective paint • High vision truck cabs • On-board computer and GPS • Back-up camera • Automated toters/tippers 	<ul style="list-style-type: none"> • 360° cameras • Collision avoidance technology • Pedestrian alert technology

2.

FAQ

Q: Does a helper riding in the cab need to wear a seatbelt between each stop?

A: Yes. All front seat passengers must wear seat belts.

Q: Can helpers use the rear step if they follow ANSI guidelines?

A: No, NYS traffic law prohibits riding on the rear step under any conditions on public roadways.

Q: What do I do if my truck does not meet industry standards?

A: Some items listed under Industry Standard are strong recommendations; however, some items are required by federal, state, or local law. If your vehicle is not equipped with the items required by law, talk to a mechanic about making the necessary repairs to bring your vehicle into compliance with these requirements. If you operate your truck and are not in compliance with safety laws, you are not only breaking the law, but putting your workers and the public at risk.

NOTES:

3.

Safe Collection Stops

3.

Training your operators to think about safety during stops is very important. Include the following practices in your safe collection stops training:

SAFE STOPS

When approaching a collection stop:

- *As you slow down, indicate you are about to stop by using the turn signal, strobe lights, or 4-way flashers. Pedestrians, cyclists, and motorists need to know what to expect.*
- *Both the driver and helper should scan all mirrors to check for bicyclists and other vehicles.*
- *Don't back up! If you miss a collection stop on your route, go around the block.*

PROPER LIFTING

To reduce the risk of injury from lifting heavy objects, keep the following in mind:

- *Take a moment to examine the load and surrounding area. If the bag is ripped or the load is too heavy, too large, or too awkward, stop and get help.*
- *Keep a wide base of support. Straddle the load with feet shoulder-width apart and facing the direction you want to go.*
- *Bend your knees and hips and keep your back straight by looking up.*
- *Lift slowly by straightening hips and knees while maintaining a firm, balanced grip on the load.*
- *Position load as close as possible without resting bags or containers directly on your body.*
- *Use smooth, controlled movements and avoid twisting.*



Do not rest bags on your legs to help you lift the load into the hopper. Doing so increases your risk of laceration or puncture wounds from sharp debris inside the bag.

CONTAINER MANAGEMENT

Use these tips if the collection route includes servicing locations with containers.

Emptying a container into a rear-loading waste collection truck:

- Cycle the hopper to make sure it is empty before lifting the container.
- Inspect the container for damage – make sure the trunnion bar or side bar “ears” are not damaged.
- Attach the trunnion bar to the pivot plate. Always use safety latches.
- Never place hands on the “ears” of the container – doing so may lead to hand or finger injuries.



Remind employees to report damaged containers so they can be repaired or replaced. Attempting to tip a damaged container may result in serious injury.

Picking up a roll-on/roll-off container:

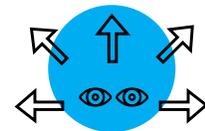
- Inspect container for damage.
- Properly align container guide rollers with container.
- Check that the hook or other lifting attachment device is securely attached prior to lift.
- Attach container hold-down strap and cover container.

If your company uses front-loading trucks in the fleet, consider developing a separate protocol to safely tip these containers in order to keep your employees safe.

HOPPER CYCLING

Tips for safely cycling the hopper:

- Make sure you are distraction free. No headphone or Bluetooth devices – even if they are off.
- No jewelry or loose clothing – the hopper could catch these and pull you in.
- Use caution and keep hands clear.
- Always stand to the side of the truck when cycling the hopper. If you stand directly behind the truck, you can be struck by the debris that is being crushed.
- Use extreme caution when cycling large or bulky items, as they may eject from the hopper.



Check surroundings before operating and be mindful of members of the public in the area.

3.

FAQ

Q: How do I know if I'm lifting correctly?

A: When you use proper lifting form, you will feel the lift in your leg and hip muscles. You should not feel pain when lifting.

Q: When should I ask for help when lifting heavy objects?

A: Ask for help if you are not sure that you can safely lift or move the object.

Q: If a container gets "stuck" in the hopper, what should I do?

A: Do not attempt to un-jam the container by yourself. Ask a supervisor for help.

Q: When should I cycle the hopper?

A: In most cases, the best practice is to cycle the hopper before it is halfway full. This reduces the risk of objects being propelled out of the hopper.

Q: What should my employees do if a container is unsafe to tip?

A: Do not tip a container unless it can be done safely. If necessary repair the container before servicing the stop.

Q: In addition to damage to the container "ears," what type of damage should I ask my employees to report?

A: Ask your employees to report any damage to the container, including broken wheels, bent trunnion bars, and rust or rot. It is important to keep containers well-maintained – doing so will help avoid injuries. Your employees should never tip a damaged container.

NOTES:

4.

End of the Shift

4.

Train your employees that a safety routine at the end of a shift and in the garage or yard is just as important as when they are out in the field.

DRIVER VEHICLE INSPECTION REPORT

At the end of each shift, FMCSA and NYS DOT regulations require drivers to complete a written Driver Vehicle Inspection Report (DVIR).¹² This report must identify the truck and list any defects that would affect the safety of operation or result in a breakdown. At a minimum, the report must cover the same parts and accessories covered under the pre-trip inspection. Managers may also want to include a comment section on this form. It allows the driver to make notes and summarize items that do not pass the inspection. Flip to the back to see a sample DVIR.

What happens if the driver finds a defect?

If the driver identifies a defect that is likely to affect the safety of the truck's operation, it must be repaired before the truck can be put back on the road. The mechanic who repairs the defect must certify that he either made the repair or that the repair is not necessary by signing the inspection report. After any necessary repairs have been made, the truck can be put back on the road.

Who has to sign the DVIR?

Both the driver at the end of the shift and the driver who will operate the truck during the next shift must sign the DVIR. Your mechanic is required to sign the DVIR when a defect is listed to either certify the necessary repairs have been made or that the defect does not affect the safe operation of the truck.

End of shift tips for your drivers:

- *By the end of a shift, the hopper may have been cycled up to 100 times. Perform a thorough inspection of the hopper and hydraulics as part of your DVIR.*
- *Cleaning out the cab and vacuuming the floor at the end of the shift keeps the dash clear and prevents debris from building up under the brake pedal.*



Safety Meetings are Key: Get everyone together at the start of a shift to go over the pre-trip inspection and DVIR. This will remind everyone why these steps are so important.

GARAGE AND YARD SAFETY

As you train your staff, don't forget about the time spent at the garage or yard.

Make a Plan:

Develop methods to safely move trucks in and around the garage or yard. This may include having regular traffic patterns and traffic directors, developing uniform hand signals to guide trucks through tight spaces or blind corners, and requiring employees to wear high-visibility clothing when in the garage or yard.

Hazardous Materials:

Garages or yards can have anti-freeze, diesel or gasoline, grease, hydraulic fluid, solvents, and other chemicals. Train your employees on how to safely handle these hazardous materials and make the safety data sheets (SDS) easily accessible at your garage or yard location.¹³

Safety Training:

Provide basic safety trainings such as fire safety, including how to use fire extinguishers and emergency exits. Other topics, such as ladder safety and truck lifts, as they apply, are important. If your garage or yard is a fueling station, staff should be trained in safe fuel and storage practices and spill prevention.

PREVENTATIVE MAINTENANCE

To keep your trucks running smoothly and safely, develop a preventative maintenance schedule in addition to your daily pre-and post-trip inspections. These regular checks should identify any needed maintenance. Either follow the manufacturer's recommended maintenance schedule or perform a "major" pre-trip inspection every 40 days.¹⁴

Use experienced mechanics who are familiar with the make and model of your trucks. If you have your own mechanics on staff, provide frequent training on new diagnostic technology and equipment.

Garage Safety Equipment



Keep a defibrillator, first aid kit, fire extinguisher, and safety data sheets accessible and with clear signs marking their location. It is a good idea to have an eye wash station.

Reminder: Always follow FMCSA regulations on when to take an unsafe truck out of service.

4.

FAQ

Q: Where do I get safety data sheets (SDS) for hazardous materials?

A: OSHA rules require that the chemical manufacturer, distributor, or importer provide an SDS for each hazardous chemical. The SDS includes information about the hazards, protective measures, and precautions for each chemical. Under OSHA rules, employers must make sure SDS for all hazardous chemicals used in the workplace are easily accessible to all employees. For more information visit www.osha.gov.

Q: I'm a very small company. Do I still need to complete DVIRs?

A: Depending on the number of trucks your company uses, you may not be required to complete a DVIR. However, even if you are not required by law, completing the DVIR will help keep all New Yorkers safer on the roads. For more information about DOT and FMCSA regulations, please visit www.dot.ny.gov/divisions/operating/oss/truck and www.fmcsa.dot.gov.

Q: My driver identifies a safety defect on the DVIR. My mechanic says nothing is wrong. What do I do?

A: If your mechanic inspects the truck and finds that nothing is wrong or that the defect does not affect the safe operation of the vehicle, the mechanic must sign the DVIR certifying that no repair was needed. After your mechanic does this, the truck can be put back into operation.

NOTES:

5.

When Things Go Wrong

5.

The goal of a comprehensive safety training is to prevent collisions and work-related injuries. However, in the event that there is an incident that results in dangerous conditions, an injury or a fatality, your staff should be prepared to respond quickly.

BREAKDOWNS

Train your employees to follow these steps to keep themselves and the public safe in the event of a truck breakdown:

- *Pull over out of the flow of traffic when possible.*
- *Maximize visibility: turn on your four-way flashers and put out an emergency triangle.*
- *Call dispatch for assistance as soon as your vehicle is stopped and safely secured.*
- *Turn off hydraulic valves if you are able to do so safely. However, do not put yourself in danger.*
- *Keep members of the public away from the vehicle.*

COLLISIONS

Collision scene best practices:

Be prepared!

Train drivers and helpers how to respond to collisions. Keep the following equipment in the truck:



Emergency Triangle



Spill Kit



Emergency Kit



Fire Extinguisher



Emergency Cell Phone



Collision Packet



Truck Tools

PREPARE A COLLISION PACKET

This should include a step-by-step guide for the driver and helper to follow in the event of a crash, helpful phone numbers like company supervisors and utility providers, a company contact card to provide to the other parties involved in the crash, vehicle registration and insurance card, and a camera to document the collision.

If you are involved in a serious collision:

- Stay calm and immediately call 911.
- Stay at the scene and set up your emergency triangle.
- Position yourself in a safe location.
- Contact dispatch.
- Provide company contact information to other parties.
- Wait for NYPD to arrive.

If there is only property damage: Exchange information such as driver's license, insurance, registration and if damage is over \$1,000 file an NYS Accident Report (Form MV-104) within 10 days.

Important note: Under certain circumstances after a collision, drivers are required by FMCSA and NYS DOT regulations to undergo drug and alcohol testing. Here are the circumstances in which you must test your driver under these rules:¹⁵

Type of Injury or Damage as Result of Crash	Citation Issued to the CMV Driver	Test Must Be Performed by Employer
Human Fatality	No	Yes
Bodily Injury With Immediate Medical Treatment Away From the Scene	Yes	Yes
Bodily Injury With Immediate Medical Treatment Away From the Scene	No	No
Disabling Damage to Any Motor Vehicle Requiring Tow Away	Yes	Yes
Disabling Damage to Any Motor Vehicle Requiring Tow Away	No	No

5.

If the driver tests positive or refuses the test, the driver is subject to additional drug and alcohol testing. For more information about FMCSA and NYS DOT required drug and alcohol testing, visit www.fmcsa.dot.gov and www.dot.ny.gov.

Safety is Number One: Go above and beyond the FMCSA requirements. Administer a drug and alcohol test to your drivers following every collision that results in an injury or if you believe your driver may have been at fault.

Important Note: No one wants to deal with a collision, but when one happens, try to learn from it. Create a collision review team to analyze collisions and how you can improve safety equipment and driver training to prevent future collisions.

FIRES

Train your staff to take the following measures:

Engine:

If you suspect there is an engine fire, pull over immediately, turn off the engine, and engage the work brake. Keep the area around the truck clear and assess the situation. Use a fire extinguisher to smother the fire if you can do so safely.

If you are not able to smother the fire, move away from the vehicle and call 911.

Hopper:

A fire in the hopper is a potentially volatile situation. If you suspect there is a fire, do not cycle the hopper, as it could cause the truck to explode.

It may become necessary to dump the load to control the fire, but never dump the load if it contains hazardous material.



Not sure what to do? Call 911 and wait for instructions from FDNY and NYPD.

ACCOUNTABILITY

Demonstrate to your employees that safety – their's and the community's – is your number one priority by rewarding safe behaviors and coaching workers to improve unsafe ones.

Reward Safe Practices:

Show your appreciation by recognizing workers for a job well done. Drivers who have safe driving records (one, five, ten, or fifteen years) can be recognized or given a token of appreciation. When a worker makes a suggestion that improves safety at your company, they should be acknowledged and others should be trained in the practice.

Written Expectations:

It is important to provide clear directives for your workers and to develop company-specific policies, in addition to following all federal, state, and local laws. You should have a protocol that allows for a graduated range of responses if your workers do not follow your rules. Here is a good place to start:

1. Place safety infractions on a scale from preventable to severe.
 - *Preventable may include clipping a mirror on a parked car, but reporting it when returning from the shift.*
 - *Events on the serious end of the scale are those that include risk of loss of life or serious injury or serious property damage.*
 - *The most severe safety infractions include failure to report a collision, a positive drug test, or behavior that is grossly negligent or results in the loss of the driver's CDL.*
2. Keep track of all safety infractions for each worker over a rolling 12-month period, so you can detect patterns.

5.

3. Determine the appropriate response for each safety infraction and communicate this system in advance. Some examples of a progressive disciplinary system are:

- **First step:** *Provide a verbal or written warning to the worker and discuss how the unsafe behavior can be corrected. You may choose to provide multiple warnings.*
- **Second step:** *If the behavior persists or is serious, then suspension or other monetary penalties like reduced pay may be necessary.*
- **Third step:** *If behavior continues to persist or is severe, termination may be necessary.*

FAQ

Q: What utility company contact information should I include in my collision packet?

A: Utility providers that service NYC are:

- **Con Edison:** 1-800-752-6633 (gas and electric); 1-800-914-9112 (steam)
- **National Grid:** 1-800-867-5222 (electric); 1-718-643-4050 (gas)
- **PSEG Long Island (Rockaways):** 1-800-490-0075 (electrical)

Q: What if my driver is involved in a collision with a parked vehicle or other property is damaged?

A: If they are not able to locate the owner, they must contact NYPD. Notify dispatch of the collision and leave a company contact card so the owner can get in contact with your company.

NOTES:



Personal Protective Equipment

Workers must wear proper PPE to reduce exposure to workplace hazards such as low visibility at night.

Recommended:



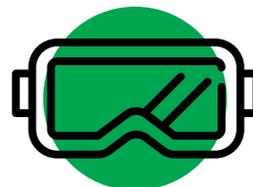
Reflective Shirt



Puncture Resistant
Gloves



Steel Toe
Boots



Clear Plastic
Goggles

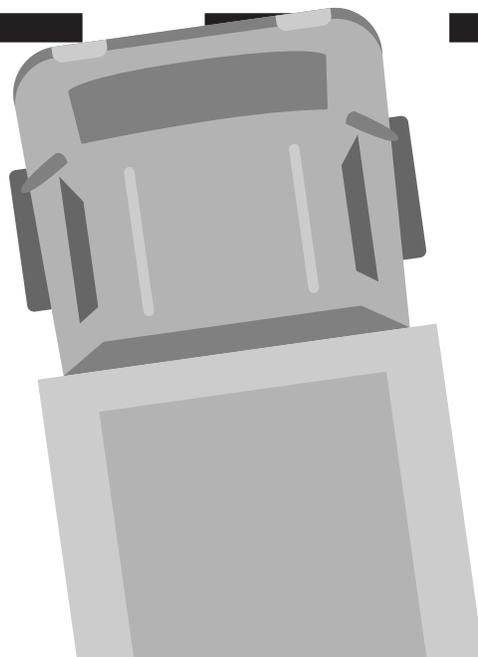




Don't Cut Corners! Turn With Caution

For safe turns:

1. Use your turn signal.
2. Expect pedestrians in the crosswalk.
3. Don't turn faster than 5 mph.
4. Look for cyclists before you turn.



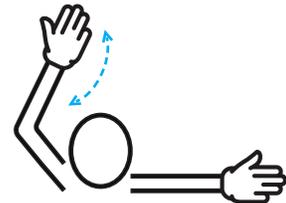


Backing Up Can Kill! Go Around the Block

If you are in a position where you absolutely must back up:

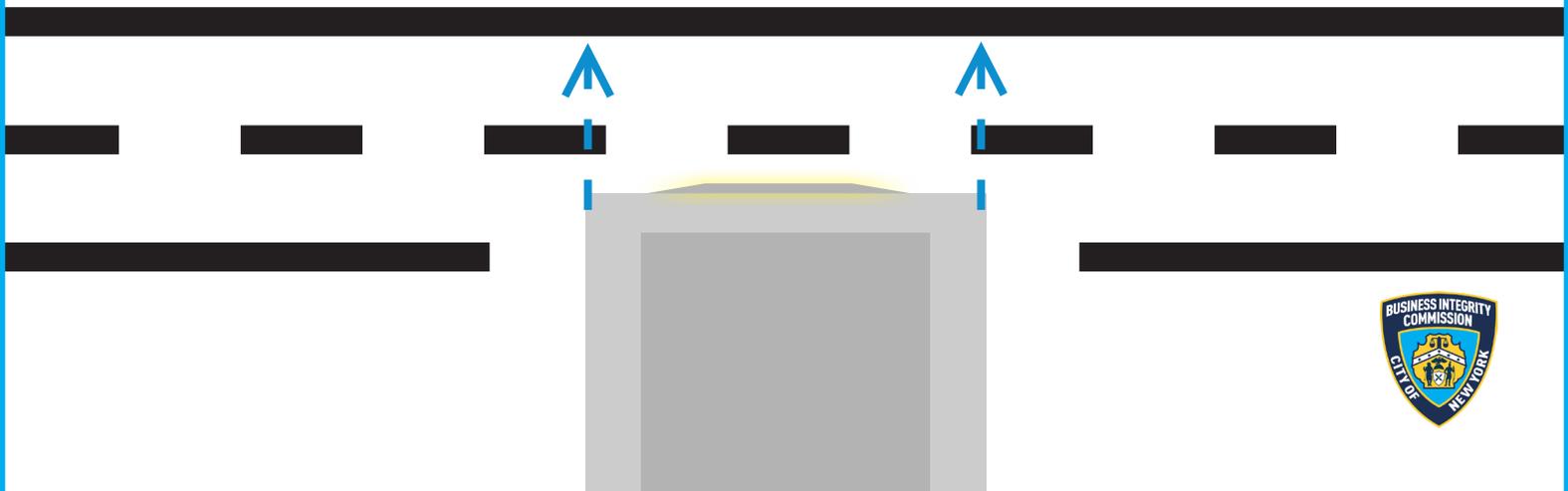
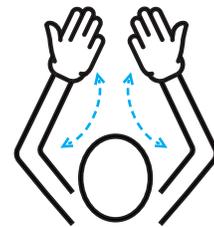
With a Helper:

1. Review hand signals.
2. The helper should be at the rear of the truck.
3. Check your mirrors and stay in constant contact with the helper.



By Yourself:

1. Exit the truck and check surroundings.
2. Back up slowly and avoid the passenger side which has lower visibility.





Driver's Vehicle Inspection Report

Check Any Defective Item and Give Detail Under "Remarks."

Date: _____

Truck/Tractor No. _____

- | | | |
|--|--|--|
| <input type="checkbox"/> Air Compressor | <input type="checkbox"/> Horn | <input type="checkbox"/> Springs |
| <input type="checkbox"/> Air Lines | <input type="checkbox"/> Lights | <input type="checkbox"/> Starter |
| <input type="checkbox"/> Battery | Head - Stop | <input type="checkbox"/> Steering |
| <input type="checkbox"/> Brake Accessories | Tail - Dash | <input type="checkbox"/> Tachograph |
| <input type="checkbox"/> Brakes | Turn Indicators | <input type="checkbox"/> Tires |
| <input type="checkbox"/> Carburetor | <input type="checkbox"/> Mirrors | <input type="checkbox"/> Transmission |
| <input type="checkbox"/> Clutch | <input type="checkbox"/> Muffler | <input type="checkbox"/> Wheels |
| <input type="checkbox"/> Defroster | <input type="checkbox"/> Oil Pressure | <input type="checkbox"/> Windows |
| <input type="checkbox"/> Drive Line | <input type="checkbox"/> On-Board Recorder | <input type="checkbox"/> Windshield Wipers |
| <input type="checkbox"/> Engine | <input type="checkbox"/> Radiator | <input type="checkbox"/> Other |
| <input type="checkbox"/> Fifth Wheel | <input type="checkbox"/> Rear End | |
| <input type="checkbox"/> Front Axle | <input type="checkbox"/> Reflectors | |
| <input type="checkbox"/> Fuel Tanks | <input type="checkbox"/> Safety Equipment | |
| <input type="checkbox"/> Heater | Fire Extinguisher | |
| | Flags-Flares-Fuses | |
| | Spare Bulbs & Fuses | |
| | Spare Seal Beam | |

Trailer(s) No.(s) _____

- | | | |
|--|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Brake Connections | <input type="checkbox"/> Hitch | <input type="checkbox"/> Tarpaulin |
| <input type="checkbox"/> Brakes | <input type="checkbox"/> Landing | <input type="checkbox"/> Tires |
| <input type="checkbox"/> Coupling Chains | <input type="checkbox"/> Lights - All | <input type="checkbox"/> Wheels |
| <input type="checkbox"/> Coupling (King) Pin | <input type="checkbox"/> Roof | <input type="checkbox"/> Other |
| <input type="checkbox"/> Doors | <input type="checkbox"/> Springs | |

Remarks: _____

Condition of the above vehicle is satisfactory

Driver's Signature _____

Above defects corrected

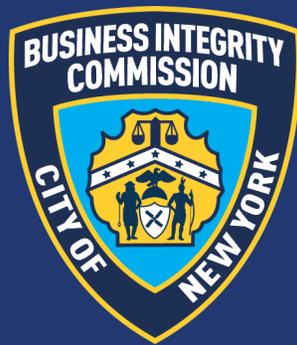
Above defects need not be corrected for safe operation of vehicle

Mechanic's Signature _____ Date _____

Driver's Signature _____ Date _____

ENDNOTES

1. 49 C.F.R. § § 382, 391 and N.Y. Comp. Codes R. & Regs. tit. 17, § § 820.2, 820.3.
2. 49 C.F.R. § 382.207 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.2.
3. 29 C.F.R. § 1910.132.
4. 49 C.F.R. § 392.7 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.4.
5. N.Y.S. Veh. & Traf. Law § 1229-c.
6. N.Y.S. Veh. & Traf. Law § 1225-c.
7. See National Safety Council, *Understanding the Distracted Brain, White Paper* (Apr., 2012), <http://www.nsc.org/DistractedDrivingDocuments/Cognitive-Distraction-White-Paper.pdf>. See also, Centre for Accident Research & Road Safety - Queensland, *Mobile Phone Use and Distraction*, (Sept., 2015), <https://research.qut.edu.au/carsq/wp-content/uploads/sites/45/2017/12/Mobile-phone-distraction-email.pdf>.
8. N.Y.S. Veh. & Traf. Law § 1233 (2).
9. N.Y.S. Veh. & Traf. Law § 1211 (a).
10. 49 C.F.R. § 393 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.5.
11. New York City Administrative Code § 16-526.
12. 49 C.F.R. § 396.11 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.7.
13. 29 C.F.R. 1910.1200 (g).
14. 49 C.F.R. § 396.3 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.7.
15. 49 CFR § 382.303 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.2.



**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: 3/14/18

(PLEASE PRINT)

Name: Cecil Corbin - Mark

Address: _____

I represent: WE ACT FOR ENVIRONMENTAL JUSTICE

Address: 1854 AMSTERDAM AVE NYC 10031

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Brendan Sexton

Address: 13th Sullivan

I represent: Energy Vision Board - former
Sanitation Commissioner

Address: _____

**DSNY THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: 3-14-18

(PLEASE PRINT)

Name: Cecil Corbin - Mark

Address: 1854 Amsterdam Ave

I represent: WEACT for Environmental Justice

Address: 1854 Amsterdam Ave

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

[]

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Kendall Christman

Address: 151 Maple St. Brooklyn

I represent: New Yorkers for Responsible

Address: Waste Management

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

[]

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: _____

(PLEASE PRINT)

Name: PAUL VOS

Address: _____

I represent: ENERGY VISION

Address: 138 E. 13 ST. NYC

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

[]

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: 3/14/18

(PLEASE PRINT)

Name: LOUIS BAILEY

Address: 1854 Amsterdam Ave

I represent: WE ACT for Environmental Justice

Address: 1854 Amsterdam Ave

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Noah Genel

Address: 100 Church St.

I represent: Deputy Commissioner / General

Address: Counsel at
(BIC)

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Cindy Haskins

Address: 100 Church St.

I represent: Assistant Commissioner

Address: of Administration Finance
@ (BIC)

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: 3/14/8

(PLEASE PRINT)

Name: Dan Brownell

Address: 100 Church St, 20th

I represent: Commissioner / Chair @ (BIC)

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Kathryn Garcia, Commissioner

Address: 125 Worth St.

I represent: DSNY

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: _____

(PLEASE PRINT)

Name: LARRY cipollina

Address: 125 Worth St

I represent: DSNY Deputy Commissioner

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: 3/14/18

(PLEASE PRINT)

Name: STEVEN COSTAS

Address: _____

I represent: DSNY

Address: 125 Worth St.

Please complete this card and return to the Sergeant-at-Arms