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July 24, 2015

Via Electronic Mail to DEP.R2@dec.ny.gov

Iver M. Anderson
NYSDEC Region 2 Headquarters
47-40 21st Street
Long Island City, NY 11101-5407

Re: Marine Transfer Station, Article 19, Air State Facility Permit
Application ID: 2-6204-00007/00013

Dear Mr. Anderson,

Please do not renew the Air State Facility Permit for the East 91st Street Marine Transfer Station that was slated for construction in 2006 as air quality conditions have changed for the worse in the near decade that has passed since its initial approval and a renewal will cause further harm to the air quality in the local residential community as well as New York City and State as a whole.

The official environmental conservation policy for the State of New York and the mission for the New York State Department of Environmental Conservation ("DEC") is to conserve, improve and protect the environment by preventing air pollution in order to enhance the health, safety, and welfare of New Yorkers.[1][2] The DEC is required by law to provide for the "prevention and abatement of all" air pollution, including hazardous particulates.[3] In fulfilling this mission and law the DEC has the power to encourage industrial, commercial, residential and community development "that has the best usage of land areas, maximizes environmental benefits and minimizes the effects of less desirable environmental conditions." [4] Therefore, as the New York City Council Member for the Upper East Side, East Midtown, Roosevelt Island and East Harlem, I call upon the DEC to fulfill its mission and uphold its obligations under law by putting the health and safety of New Yorkers and our environment above politics and hereby request that the Article 19 Air State Facility permit for the East 91st Street Marine Transfer Station ("MTS") not be renewed.

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[1] ECL § 1-0101 Declaration of Policy
[2] "DEC's Mission." About DEC. New York State Department of Environmental Conservation, n.d. available at http://www.dec.ny.gov/24.html20 July 2015.
[3] ECL § 3-0301. General functions, powers and duties of the department and the commissioner.
[4] *Id.*

Waste Will Be Redirected from Industrial NJ to Residential NYC

Residential waste from Community District 5, 6, 8 and 11 which is currently all going to industrial areas in New Jersey will be redirected to the Marine Transfer Station at East 91st Street within one quarter mile of 22,056 residents, 6,755 residents of color, 1,059 children, 1,172 units of NYCHA, and bisecting Asphalt Green where 34,000 children play, and harming all four community districts through which garbage trucks will drive. Sanitation Commissioner Garcia further admitted that 100% of Manhattan's residential waste currently goes to New Jersey.[5] The DEC must obey the law to provide for the "prevention and abatement of all" air pollution and provide for "the best usage of land areas, maximizes environmental benefits and minimizes the effects of less desirable environmental conditions" for New Yorkers by not renewing this permit so that residential waste can continue to go to industrial areas in New Jersey instead of residential neighborhoods in New York City and State.[6]

Exhaust from Hundreds of Residential Garbage Truck Trips Will Harm Air Quality

The East 91st Street Marine Transfer Station ("MTS") is capable of 24-hour continuously processing 5,280 tons per day, a three shift capacity of 4,290 tons per day. For residential waste, the average peak day will be 864 tons, requiring 75 to 129 trucks per day, each carrying a load of 6.6 to 11.5 tons and peak hour arrival rate of 28 vehicles likely spanning three to five hours of a truck every one or two minutes between 8am and 8pm every day. Once they arrive 19 trucks will cue on a ramp bisecting a children's park, idling for up to 3 minutes at any given time. Containers would be loaded with waste from two or three garbage trucks for approximately 20 to 22 tons of waste, with each barge loaded with 48 containers or 960 tons of waste, requiring a minimum of one to as many as five barges per day.[7] The barges will be tugged from East 91st Street down the East River, with tugs releasing high levels of air pollution harming Queens and Brooklyn as they pass on their way to Staten Island where the barges will be docked at an intermodal facility in order to transfer containers to railcar. Empty containers will be loaded back on to the barge for a return trip passing Brooklyn and Queens again in order to deliver the empty containers.[8] The East River and surrounding boroughs would have anywhere between two and ten tug boats with garbage barges every day. Last but not least rail cars would then bring containers full of waste to be transferred to trucks and hauled to landfills and waste to energy facilities.

[5] *Transcript of the Minutes of the Committee on Finance Jointly with the Committee on Transportation and the Committee on Sanitation and Solid Waste Management*, N.Y.C. Council, 262-266 (2014) (testimony of Department of Sanitation Commission Kathryn Garcia). Print.
[6] ECL § 3-0301. General functions, powers and duties of the department and the commissioner.
[7] "East 91st Street MTS Engineering Report," Section 2.0 General Operating Plan: East 91st Street MTS Facility, Final Part 360 Permit Application, January 2007.
[8] *Id.*

Garbage collection trucks are rated as class VII heavy-duty vehicles using diesel with a gross vehicle weight rating of 26,001 – 33,000 pounds with average in-use emissions rates in grams per mile are: 7.471 of nitrogen oxides, 0.177 of fine particulate matter under 2.5 microns in diameter (PM2.5), and 0.192 of particulate matter under 10 microns in diameter (PM10).[9]

Residential garbage collection trucks at a rate of the between 75 and 129 trucks per day, would be driving almost entirely through residential neighborhoods in order to cue on a ramp, 19 at a time for up to 3 minutes, releasing thousands of pounds of air pollutants in certain cases, at the aforementioned rates, seriously harming air quality in a residential neighborhood. The DEC must protect the 22,056 residents living within one quarter mile of the MTS by not renewing this permit in order to these harms to air quality.

Exhaust from Hundreds of Commercial Trash Truck Trips Will Harm Air Quality

The Marine Transfer station is currently slated for 780 tons per day of commercial waste, between the hours of 8pm and 8am, where there are 2,183 tons per day of available capacity, for commercial collection vehicles delivering an average of 11 tons per truck, a peak hour of approximately 19 to 21 trucks, for a total average minimum of 71 commercial trucks per day, with available capacity for 199.[10]

Unlike DSNY residential waste trucks that have been retrofitted to eliminate almost all of the toxic compounds that exist in diesel exhaust, commercial waste trucks made before 2007 do not have the same filters that DSNY residential waste trucks have. Startlingly, 90% of the commercial waste truck fleet in New York City has not been retrofitted to filter out toxins in diesel exhaust.[11] Clearly, commercial waste trucks will contribute an even more significant amount of pollution into the air around the MTS.[12] Commercial waste trucks are the largest source of pollution in New York City's solid waste system, making up about 93% of total $PM_{2.5}$ emissions and 90% of NO_x emissions from waste collections and transport into the atmosphere.

[9] Office of Transportation and Air Quality, "Emission Facts: Average In-Use Emissions from Heavy-Duty Trucks," United States Environmental Protection Agency, EPA420-F-08-027, October 2008 available at http://www.epa.gov/otaq/consumer/420f08027.pdf

[10] "East 91st Street MTS Engineering Report," Section 2.0 General Operating Plan: East 91st Street MTS Facility, Final Part 360 Permit Application, January 2007.

[11] *Cost and Environmental Issues At the East 91st Street Marine Transfer Station: Implications for The Solid Waste Management Plan and New York City*. Tech. Pledge2Protect - Gladstein, Neandross & Associates, 31 Jan. 2014. July 2015. 11. <http://pledge2protectnyc.org/wp-content/uploads/2015/03/GNA-Technical-Report.pdf>

[12] East 125th Street Development New York City Economic Development Corporation. *Solid Waste and Sanitation Services*. N.d. New York, New York. 3.13-1. Available at http://www.nyc.gov/html/oec/downloads/pdf/dme_projects/07DME025M/FEIS/07DME025M_%20FEIS_14_Solid_Waste.pdf. July 2015.

Although newly introduced EPA standards will require garbage trucks to reduce fuel consumption and gas emissions by 16% in the year 2027, this only applies to trucks starting with model years 2021-2027.[13] This is particularly troubling when, currently, 90% of the commercial waste truck fleet predates 2007, before these trucks could have been equipped with particulate filters. While New York City has required commercial waste trucks to meet federal emissions standards by 2020, the MTS is slated for opening in 2017.[14]

The DEC must meet its legal obligation of "prevention and abatement" of air pollution by not renewing this permit until 100% of the commercial waste truck fleet meets the federal emissions guidelines and should consider never renewing this permit for dumping by commercial waste vehicles that will harm air quality.

Tugs Will Harm Air Quality in All Five Boroughs

Tug boats generate air pollution each and every hour they operate at a rate of 44.1 $PM_{2.5}$, 30.9 NO_x/10, and 20.8 CO_2/10000.[15] Tugs emit 8 times more particulate matter and 3.6 times more NO_x than diesel fuel trucks. The contrast between tugs and diesel trucks is stark considering that diesel fuel trucks can be equipped with highly advanced engine and emission control equipment that can also reduce the amount of fuel used by the trucks. This technology does not yet exist, however, to retrofit tug engines.[16] The MTS will require barges loaded with 48 containers or 960 tons of waste to be tugged by tug boats from East 91st Street to Staten Island, passing Queens and Brooklyn, releasing air pollution along the way, then returning back with empty containers at least once and as many as five times days, passing and polluting each neighborhood up to ten times. This is in place of simply picking up waste in Manahattan Community District 5, 6, 8 and 11 and driving directly to industrial areas in New Jersey, without impacting any other borough. The DEC must not renew this permit in order stop unnecessary air pollution generated by tugs and protect neighborhoods along the waterfront in Manhattan, Queens, Brooklyn, and Staten Island.

[13] EPA and NHTSA Propose Greenhouse Gas and Fuel Efficiency Standards for Medium- and Heavy-Duty Trucks: By the Numbers. 2-3. June 2015 available at http://www.epa.gov/otaq/climate/documents/420f15903.pdf. July 2015.
[14] Hu, Winnie. "New York Looks to Cut Emissions by Private Trash Haulers." *The New York Times*. The New York Times, 11 Nov. 2013 available at http://www.nytimes.com/2013/11/12/nyregion/new-york-looks-to-cut-emissions-by-private-trash-haulers.html?_r=0. 22 July 2015.
[15] Varalakshmi Jayaram, "Evaluating Emission Benefits of a Hybrid Tug Boat," California Air Resources Board, October 2010 available at http://www.arb.ca.gov/ports/marinevess/harborcraft/documents/hybridreport1010.pdf
[16] *Cost and Environmental Issues At the East 91st Street Marine Transfer Station: Implications for The Solid Waste Management Plan and New York City*. Tech. Pledge2Protect - Gladstein, Neandross & Associates, 31 Jan. 2014. Web. July 2015. 8-10 <http://pledge2protectnyc.org/wp-content/uploads/2015/03/GNA-Technical-Report.pdf>

Exhaust from the Marine Transfer Station Will Harm Air Quality

The Marine Transfer Station will ventilate contaminated air sprayed with water and odor controls into the surrounding community.[17] In addition to air pollutants release by garbage trucks dumping trash in the facility and tugs tugging barges full of trash from the facility, there will also be air pollutants released by on-site mobile equipment including wheel loaders, tamping crane, skid-steer loaders mini-vacuum sweeper, bucker lift, scissor lift, large forklift, and a medium forklift.[18] Exhaust from diesel trucks have contributed to poor air quality, high ozone levels, and smog, in New York City for decades. Notably, in 2012, the World Health Organization classified diesel engine exhaust as carcinogenic, finally recognizing the unhealthy contribution that exhaust has made to air quality.[19] The DEC must not renew the permit in order to protect air quality from diesel exhaust from equipment operating in the MTS that will be ventilated directly into the surrounding residential neighborhood.

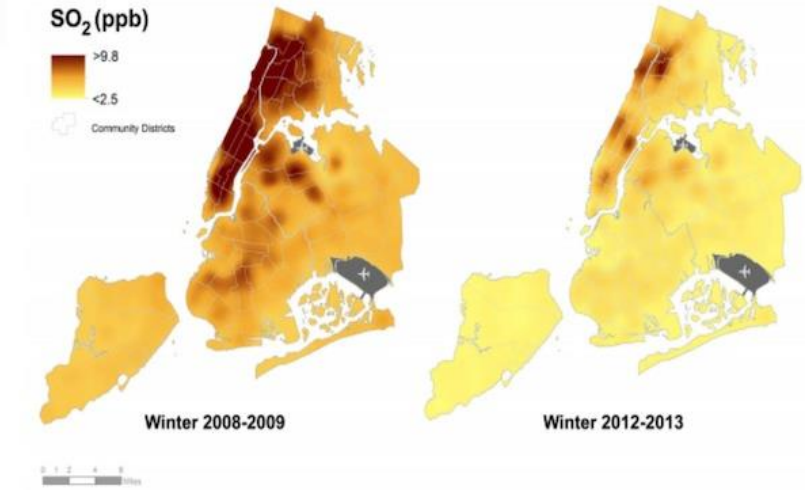
Preserving Zoning's Distinction between Residential and Manufacturing Uses

Finally, granting these permits would flagrantly ignore the intent behind zoning laws that are designed to protect residential communities, especially those with children and sensitive populations, safe from the hazards of a MTS. Moreover, every MTS in the city is located in area zoned for manufacturing, except for the MTS, which is within a half mile of 11 day care centers and 16 schools. Additionally, this MTS impacts more people, schools, and public parks than many other MTS even taking as a group, including a large number of people, especially children, who visit the area to use Asphalt Green as well as the limited open park and play space. The impact of granting the permit for this MTS is therefore unprecedented and highly risky to people who rely on safe schools and public parks in the neighborhoods surrounding the MTS.[20] Furthermore, existing law bars private transfer stations from being within 400 feet of a residential district, public park, school, and hospital. But with commercial waste coming into the MTS twelve hours a day, and contributing greatly to the pollution in the vicinity of the MTS, the MTS will be operating as a de facto private MTS for at least half of the day. It's unfair to the residents around the MTS to experiment with their health, especially when asthma rates are higher than the average in the city, and air quality is low .[21]

[17] "East 91st Street MTS Engineering Report," Section 2.0 General Operating Plan: East 91st Street MTS Facility, Final Part 360 Permit Application, January 2007.
[18] "East 91st Street MTS Engineering Report," Section 2.0 General Operating Plan: East 91st Street MTS Facility, Final Part 360 Permit Application, January 2007.
[19] Talking Trash: A Modern Approach That Protects Communities, Increases Recycling And Reduces Costs. Publication. Pledge 2 Protect, n.d. Web. July 2015. <http://pledge2protectnyc.org/P2P_report-talking_trash.pdf>.
[20] Gladstein, Neandross & Associates. *Addressing Community Concerns at the East 91st Street MTS*. 9 May 2014. New GNA Analysis for the Asphalt Green/Pledge 2 Protect Bus Tour.
[21] *Cost and Environmental Issues At the East 91st Street Marine Transfer Station: Implications for The Solid Waste Management Plan and New York City*. Tech. Pledge2Protect - Gladstein, Neandross & Associates, 25. 31 Jan. 2014 available at <http://pledge2protectnyc.org/wp-content/uploads/2015/03/GNA-Technical-Report.pdf>. July 2015.

The DEC must obey the law to provide for the "prevention and abatement of all" air pollution[22] and provide for "the best usage of land areas, maximizes environmental benefits and minimizes the effects of less desirable environmental conditions" [23] for New Yorkers by not renewing this permit so that waste can continue to go to industrial areas in instead of to Residential neighborhoods in New York City.

Air Quality Has Stagnated or Gotten Worse In Neighborhood Since Initial Approval, While Air Quality Has Improved Citywide



Despite major improvements citywide regarding air quality, statistics show that for certain metrics, air quality has worsened or remained the same in East Harlem and the Upper East Side. For example, in East Harlem, asthma emergency department visits attributable to ozone O_3 exposure for children under 18 has increased from 2005 to 2011.[24] According to the American Lung Association, a major source of illness from ozone exposure is gases coming from vehicles and smokestacks.[25] Outdoor air pollutants, including both NO_2 and $PM_{2.5}$ have essentially remained at the same levels from 2009 until 2013 at rates higher than the average for Manhattan as well as the city overall. Perhaps most tellingly, even in some metrics where the neighborhoods surrounding the MTS fare better than the rest of the city, health conditions are getting worse. Specifically, asthma hospitalizations on the Upper East Side attributable to O_3 exposures for children under 18 are generally lower than that of the rest of the city or Manhattan, but have increased significantly between 2005 and 2011.[26] Notably, despite citywide improvements in air quality, especially since 2008-2009, the Upper East Side and East Harlem have remained hot spots for SO_2 and Ni concentrations.[27] SO_2 exposure can lead to an array of negative health effects including bronchoconstriction and symptomatic asthma, particularly in asthmatics and the elderly. In fact, adverse respiratory

[22] ECL § 3-0301. General functions, powers and duties of the department and the commissioner.
[23] *Id.*
[24] "Outdoor Air and Health in East Harlem." New York City Environment & Health Data Portal. Available at http://a816-dohbesp.nyc.gov/IndicatorPublic/NewQuickView.aspx. 20 July 2015.
[25] "Ozone Pollution - State of the Air 2014." *State of the Air 2014*. American Lung Association, 2014 available at http://www.lung.org/press-room/press-releases/healthy-air/SOTA-2014-National-Press-Release.html. 22 July 2015.
[26] "Outdoor Air and Health on the Upper East Side." New York City Environment & Health Data Portal. Available at http://a816-dohbesp.nyc.gov/IndicatorPublic/NewQuickView.aspx. 20 July 2015.
[27] Armstrong, Lindsay. "Upper East Side Air Quality Worse Than South Bronx, Stats Show." DNAinfo New York, 26 June 2014 available at http://www.dnainfo.com/new-york/20140626/upper-east-side/upper-east-side-air-quality-worse-than-south-bronx-data-shows. July 2015.

symptoms can be felt within just five minutes of exposure to high amounts of SO_2.[28] Heavy Ni concentrations have been linked to cancerous and non-cancerous respiratory illnesses, contact dermatitis, lung infections, and other adverse health effects.[29] Renewing this permit would add insult to injury, by making air quality worse in one of the few remaining SO_2 hotspots in the City, as such the DEC must not renew this permit until air quality in the area has no more hotspots and sees similar improvements to those citywide.

High Children's Asthma Rates and Poor Health Will Only Increase If Permit Is Renewed

Among those most likely to be adversely affected by the MTS are residents of East Harlem living three blocks away, who experience disproportionately high rates of asthma hospitalizations and emergency room visits in children and young adults, health events such as asthma attributable to fine particulate matter and ozone in the air. For example, asthma hospitalizations for East Harlem children between ages 0 and 4 is nearly double the rate of the rest of New York City, and nearly three times the rate of the rest of Manhattan. Further, asthma emergency room visits attributable to exposure to $PM_{2.5}$ fine particulates in the air is similarly double the rate of the rest of Manhattan, and nearly two-thirds higher than that of the rest of the New York City.[30] The Division of Toxicology at the Agency for Toxic Substances and Disease Registry (ATSDR) at the Centers for Disease Control (CDC) list Nitrogen Oxides as a hazardous substance which can cause irritation, burns and damage to respiratory airways.[31] Making matters worse, exposure to harmful diesel exhaust in the air from trucks leaving or entering the MTS will result in even greater potential risk of health impacts, especially for the thousands of children that attend the 11 day care centers and 16 schools within a half mile of the MTS site.[32] Renewing this permit will allow the MTS begin operations will increase the fine particulate matter ($PM_{2.5}$), ozone, and diesel, that will increase children's asthma rates in East Harlem. The DEC must not renew this permit in order to protect air quality from harms that will lead to an increase in damage to respiratory airways and asthma in children.

[28] "Sulfur Dioxide Health." *Six Common Pollutants*. Environmental Protection Agency, Mar. 2015 available at http://www.epa.gov/airquality/sulfurdioxide/. July 2015.
[29] U.S. Agency for Toxic Substances and Disease Registry. Centers for Disease Control. *Toxic Substances Portal: Public Health Statement for Nickel*. Agency for Toxic Substances and Disease Registry, Aug. 2005 available at http://www.atsdr.cdc.gov/PHS/PHS.asp?id=243&tid=44.July 2015.
[30] "Asthma and the Environment (East Harlem)." New York City Environment & Health Data Portal. Available at http://a816-dohbesp.nyc.gov/IndicatorPublic/NewQuickView.aspx. 20 July 2015.
[31] Agency for Toxic Substances and Disease Registry (ATSDR), "The Division of Toxicology ToxFAQS: NITROGEN OXIDES," Centers for Disease Control (CDC), April 2002 available at http://www.atsdr.cdc.gov/toxfaqs/tfacts175.pdf
[32] *Cost and Environmental Issues At the East 91st Street Marine Transfer Station: Implications for The Solid Waste Management Plan and New York City*. Tech. Pledge2Protect - Gladstein, Neandross & Associates, 31 Jan. 2014. Web. July 2015. 5-6. <http://pledge2protectnyc.org/wp-content/uploads/2015/03/GNA-Technical-Report.pdf>

Radioactive Waste Will Harm Environment and Air Quality

The Marine Transfer Station is expected to receive radioactive waste and will be equipped with two stationary radiation detection systems to monitor for unacceptable levels of radioactive materials.[33] This is especially alarming because if heated, or if any waste surrounding the radioactive waste catches fire, radioactive waste could put increased amounts of radon in the air, worsening air quality, and putting surrounding communities at higher risk of lung cancer and other ailments.[34] In fact, radon exposure is the most common cause of lung cancer among non-smokers. Even incremental increases to radon can increase the risk of lung cancer and other related ailments, [35] especially if a community is already exposed to higher amounts of radon, which is common in areas with high levels of diesel exhaust or other fossil fuel burning machinery.[36]

Conclusion

I hereby request that the DEC not to renew the Air State Facility Permit for the East 91st Street Marine Transfer Station in order to meet with your mission, obligations under law, to improve and protect the environment by preventing air pollution in order to enhance the health, safety, and welfare of New Yorkers, and to prevent and abate all air pollution, including hazardous particulates. The MTS will redirect waste and air pollution from out of state in order to release harmful exhaust from residential trash trucks, commercial trash trucks, tugs, equipment operating within MTS, harming air quality in a neighborhood with a hotspot, among the worst air quality in the city, where children already have high asthma rates. The DEC has a duty to put our environment and our residents over politics by not renewing this permit.

[33] "East 91st Street MTS Engineering Report," Section 2.0 General Operating Plan: East 91st Street MTS Facility, Final Part 360 Permit Application, January 2007.
[34] Emshwiller, John R. "Radioactive Waste in St. Louis at Risk From Smoldering Trash." U.S. The Wall Street Journal, 24 July 2014. Web. July 2015. <http://www.wsj.com/articles/radioactive-waste-in-st-louis-at-risk-from-smoldering-trash-1406219385>.
[35] "Radon Health Risks." EPA. Environmental Protection Agency, 16 Jan. 2015. Web. July 2015. <http://www.epa.gov/radon/healthrisks.html#head>.
[36] "Environmental Health and Medicine Education." *Radon Toxicity Case Study: Who Is at Risk of Radon Exposure?* Centers for Disease Control, 1 June 2010. Web. July 2015. <http://www.atsdr.cdc.gov/csem/csem.asp?csem=8&po=7>.

BENJAMIN J. KALLOS
NEW YORK CITY COUNCIL MEMBER
DISTRICT 5, MANHATTAN

Transcript of the Minutes of the Committee on Finance Jointly with the Committee on Transportation and the Committee on Sanitation and Solid Waste Management, N.Y.C. Council, 262-266 (2014) (testimony of Department of Sanitation Commission Kathryn Garcia)

squeezed tighter and tighter in all of our facilities. So we're trying to figure out a very clear plan so we can prioritize across communities to make sure that we're not impacting them. Because we're -- we want to be good neighbors, and we also want to be able to operate.

COUNCIL MEMBER CONSTANTINIDES: I appreciate that. Thank you, Commissioner for all your good work.

CHAIRPERSON FERRERAS: Thank you, Council Member. We will have Council Member Kallos followed by Council Member Crowley.

COUNCIL MEMBER KALLOS: Good afternoon. Thank you Finance Chair Julissa Ferreras, and Chair of Sanitation Antonio Reynoso, and my fellow Committee members for allowing me to speak today, and get answers our city deserves. Welcome to Sanitation Commissioner Kathryn Garcia. Thank you for joining me last Friday and Pledge to Protect on a day-long tour of Transfer Stations in Staten Island, Brooklyn, Manhattan, and then Brooklyn again.

COMMISSIONER KATHRYN GARCIA: And a lot of the bequey [sp?].

COUNCIL MEMBER KALLOS: And a lot of the bequey [sp?]. Our new Administration has already done so much to fix damage done by the previous administration. We ended Stop and Frisk; overturned vetoes on paid sick leave; made good on promises to the universal Pre-K; new contracts for those who haven't had them for years; and a commitment to affordable housing over stadiums. Please continue to reverse poor policies from the previous administration. Please this Marine Transfer Station. This station is being placed between an Olympic training ground serving 30,000 children from all five boroughs and a housing development with 1,173 units within feet of six schools, 22,056 residents, and 6,755 residents of color.

These staggering numbers demonstrate a greater impact in one location than nearly all six of the other planned locations combined. Please stop this marine transfer station. Both of the Chairs of this hearing had asked you questions about the Solid Waste Management Plant, and I quote, have both said either, "It makes no sense" or "It doesn't make sense." The marine transfer stations violate borough equity by dumping Manhattan trash in Staten Island,

another borough, instead of New Jersey, another state that actually wants our trash. The marine transfer stations have become a billion dollar boondoggle that is already exceeding the cost overruns seen in the City's time scandal.

The marine transfer stations will force radioactive trash trucks to drive a children's park. Please stop the Marine Transfer Station. Commissioner, I ask you to put your considerable talent to working with the Council and my community to stop this marine transfer stations, and focus on a modern 21st Century solution that improves recycling, and ends the cycle of waste to marine transfer, to landfill that these stations represent. We're the greatest city in the world, and we can do better than this.

In the interest of time, and the fact that I only have two minutes and 30 second left, I'm going to ask a whole series of questions, 18 in total, and if you can try to give ten-second answers or yes or no where that's directed. The first question is: Have you read the Talking Trash Report?

COMMISSIONER KATHRYN GARCIA: Yes.

COUNCIL MEMBER KALLOS: Will you -- do you agree with the findings of the report?

COMMISSIONER KATHRYN GARCIA: I'm going to answer that as a yes, no. It's a much longer conversation. There are parts of it that I feel are very --

COUNCIL MEMBER KALLOS: [interposing] Have you provided a response to the findings that you disagree with?

COMMISSIONER KATHRYN GARCIA: I have not provided a written response, but to protect--

COUNCIL MEMBER KALLOS: [interposing] Will you?

COMMISSIONER KATHRYN GARCIA: I actually told Kelly yesterday that I would sit down with her and go through the findings.

COUNCIL MEMBER KALLOS: So as a Council Member, I'm asking that you provide --

COMMISSIONER KATHRYN GARCIA: [interposing] I'm happy to provide a written response.

COUNCIL MEMBER KALLOS: Thank you very much. Where does Manhattan's residential waste currently go?

COMMISSIONER KATHRYN GARCIA: It currently goes to New Jersey or to Yonkers.

COUNCIL MEMBER KALLOS: Does all of -- Is New Jersey a borough?

COMMISSIONER KATHRYN GARCIA: New Jersey is not a borough of the City of New York.

COUNCIL MEMBER KALLOS: Under the SWMP, will Manhattan trash go from 91st Street to Staten Island?

COMMISSIONER KATHRYN GARCIA: Yes, it will go to the New Jersey -- into the New York Container Terminal.

COUNCIL MEMBER KALLOS: Is Staten Island a borough?

COMMISSIONER KATHRYN GARCIA: Staten Island is borough.

COUNCIL MEMBER KALLOS: Is burdening on borough, Staten Island, with another borough's, Manhattan's trash, borough equity?

COMMISSIONER KATHRYN GARCIA: We think that we are consistent with borough equity under this plan. And they do not feel that since it stays containerized the whole time it's on the island that they have not raised issue with it.

COUNCIL MEMBER KALLOS: You just told the Chair of the Finance Committee that you could not send something from Far Rockaway to another part of Brooklyn even though the Sanitation Chair agreed that it might be better to with less truck traffic because of borough equity. Because hard and fast, you cannot take trash from one borough to another because of borough equity. So I find that this is a clear -- this clearly a violation of that term. In terms of cost overruns, the estimated cost for 91st Street Marine Transfer Station was $43.9 million in Fiscal Year 2002 to 29005?

COMMISSIONER KATHRYN GARCIA: Uh-huh.

COUNCIL MEMBER KALLOS: $121.8 million Fiscal Year 2008-2009 and $181.6 million in Fiscal Year 2013-2014. What is it now?

COMMISSIONER KATHRYN GARCIA: $215.

COUNCIL MEMBER KALLOS: So that is a 489% increase. So almost five times the original cost.

COMMISSIONER KATHRYN GARCIA: Right, but you have to ask --

COUNCIL MEMBER KALLOS: [interposing] So this is the same track as City Time that was added. The only --

COMMISSIONER KATHRYN GARCIA: No, this is a very, very -- Actually that's -- this is a very different issue. City Time was registered contract at $75 million that escalated by ten times. These were not registered contracts. These were preliminary designs, which did not get registered for many years. So you have escalation, and you have redesign that happens prior to bidding the contract. Many of the items that caused this cost overruns are to make it so we can be a good neighbor to the community. Such as having negative air pressure within the facility to hold odors in.

And so, that we have a facility that mitigates noise. And so we have a facility that has odor neutralizers. And so that we have a facility with rapid roll-up doors. So we are getting trucks in and out as quickly as possible. So that we can mitigate any trucks on the ramp so that there's no queuing on York Avenue. So these are all things that changed the design of the facility over time. Having a preliminary estimate before you've actually done design, is a very different situation than what happened during City Time, which was a criminal situation. So the comparison is not applicable.

CHAIRPERSON FERRERAS: Thank you, Council Member Kallos, and we will have Crowley followed by Council Member Miller.

COUNCIL MEMBER CROWLEY: Good afternoon. I want to thank both of our Chairs. I know for the Finance Chair, it's been a long day already, but I do welcome you, Commissioner, here to the Chambers. I have a number of questions. First I want to start with street waste paper or waste baskets.

COMMISSIONER KATHRYN GARCIA: Okay.

COUNCIL MEMBER CROWLEY: I know that one of my colleagues earlier asked about -- Constantinides -- about situations that are happening in his district. For me, as it relates to sanitation concerns, it's the number one complaint we receive as it relates to our various different business districts. Some of my colleagues in their discretionary budget pay for private companies like Ready, Willing, and Able. They're very expensive. I want to really work with the Department to have the City make sure that our business districts are clean. Is there any plan in the budget for making that happen?

BENJAMIN J. KALLOS
NEW YORK CITY COUNCIL MEMBER
DISTRICT 5, MANHATTAN

"East 91st Street MTS Engineering Report," Section 2.0 General Operating Plan: East 91st Street MTS Facility, Final Part 360 Permit Application, January 2007

2.0 GENERAL OPERATING PLAN

2.1 East 91st Street MTS Facility Description

2.1.1 Overview

The Converted East 91st Street MTS will be designed and built with the capability to containerize DSNY-managed Waste for export to out-of-City disposal facilities for the foreseeable future. If maintained properly, a facility of this nature will typically have a life expectancy close to 50 years. Major equipment, such as cranes, shuttle cars, barges, tugs, etc., is expected to last around 20 years. Mobile equipment, such as front-end loaders, forklifts, sweepers, etc., is expected to last around 8 years. As discussed below, the SWMP authorizes the processing of a specified quantity of commercial putrescible waste using available capacity in the facility. Sheets 7 through 13 and 15 through 21 in Appendix J – Engineering Drawings, present a site plan, floor plans and cross-sections of the East 91st Street MTS. Waste will be delivered to the East 91st Street MTS by a variety of waste collection vehicles, primarily consisting of packer and dual-purpose trucks, including collection vehicles operated by DSNY, other City agencies (e.g., the Department of Parks and Recreation, New York City Housing Authority and non-profit institutions, such as schools, hospitals and certain non-City public agencies) and authorized private carters. In order to enter the MTS, waste delivery vehicles will ascend a ramp to an elevated tipping floor. Waste will be weighed and recorded on an inbound scale located inside of the building at the entrance to the tipping floor level. After weigh-in, trucks will be directed to one of six tipping bays to discharge waste onto the loading floor. Empty vehicles will exit the building and cross over an outbound scale at the bottom of the ramp.

The loading floor will be located 12 feet below the tipping floor. On the loading floor, front-end loaders will push the waste into loading slots located over open-top containers. The containers will be mounted on battery-operated shuttle cars that will move on tracks at the pier level of the building, located 16 feet below the loading floor. When loading is complete, the open-top containers will be moved into position at the enclosed lidding area of the processing building and will be securely lidded with a gasketed steel lid via pressure from a hydraulic lift with a spreader device. Then, the roll-up door to the lidding area will open, and the sealed containers will move via the shuttle cars onto the outdoor pier level. Gantry cranes will then load the containers onto a

barge moored to the pier. The barges, with a containerized waste payload of approximately 1,056 tons (and a gross payload of 1,308 tons), will be: (i) towed to intermodal facilities where the containers will then be transloaded to either trains or larger barges for transport to out-of-City disposal sites; or (ii) towed directly to a disposal facility. Pier level operations (barge loading/unloading and crane movements) will be performed by a qualified outside contractor hired by DSNY. For further information, see Appendix I – Transfer, Transport and Disposal Plan.

2.1.2 Basis of Design

The design for containerizing waste at the MTS has been developed based on waste deliveries from previously served Manhattan Community Districts (CDs) M5, M6, M8 and M11 to meet the following objectives:

- The MTS must have sufficient processing capacity, including redundancy for unscheduled equipment outages, to assure that the maximum peak day volumes of DSNY-managed Waste collected from Manhattan CDs M5, M6, M8 and M11 (Primary Wasteshed) will be processed within a 24-hour period.
- The MTS design must take into account the assumption that DSNY will maintain, upgrade and replace elements of this MTS as necessary and as long as it is required for the Long Term Export Program.
- The design includes an allowance for seasonal variations in waste deliveries and for growth in waste deliveries due to factors such as population growth.
- The MTS design must have the flexibility to facilitate efficient operations by enabling average waste deliveries to be containerized during two to three 8-hour shifts, with excess capacity during the first shift (12:00 a.m. to 8:00 a.m.) typically reserved for Commercial Waste receiving, processing and maintenance activities.
- The MTS design must take into account the constraints imposed by: (i) limited capacity for on-pier storage of empty and/or full containers; (ii) the time consumed during barge-shifting operations; and (iii) potential weather- or tide-related delays in tugboat arrivals.
- Enabling the East 91st Street MTS to provide backup capacity the DSNY can use to address upset conditions such as an equipment failure, electrical outage or other circumstances that would result in the need for waste flow to be temporarily redistributed from one facility to other nearby facilities.
- Enabling the East 91st Street MTS to provide backup capacity the DSNY can use to address system-wide emergencies. An example of a system-wide emergency is a winter blizzard causing City-wide suspension of DSNY's waste collection operations over several days, with the consequent need to process the large accumulated inventory of waste set out for collection.

Details of the MTS design are described in Sections 2.1.3 through 2.1.4.

In order to define the average and peak hourly design parameters for sizing the Converted MTSs, historical data regarding tonnage and truck arrival rates from Fiscal Year (FY) 1998 were evaluated and analyzed.[7] Based on these analyses, it was determined that the Converted MTS should be designed with a tipping floor capable of accommodating as much as 36 collection vehicles per hour and a loading level able to process and containerize up to 220 tons of waste per hour.

If the facility were to operate at full capacity over an entire day, (that is three shifts with an average productivity of 6.5 hours per shift), it could process 4,290 tons of waste. Under emergency conditions, additional staff would be assigned to support 24-hour continuous operation and the MTS would be capable of processing 5,280 tons per day (tpd). These hourly throughput and daily capacity parameters are also based on the following:

- The MTS would process 10 containers per hour using three loading slots with the fourth maintained in a spare mode (see Appendix G, Attachment 3 – Design Throughput and Cycle Time Calculations, for further details);
- The loader level would be kept as clear of waste as possible during processing hours by loading all waste received into containers as soon as possible and keeping stockpiles at a minimum;
- Each container would be loaded with approximately 20 to 22 tons of waste;
- Each barge would be loaded with 48 containers of waste;
- Barge switches would not interrupt waste processing operations; and
- The entrance ramp to the East 91st Street facility is designed to accommodate 19 trucks in queue at any given time.

[7] 1998 was the last year complete data were available for MTS operations. Note that the environmental review for each MTS was performed using the Average Peak Day deliveries from FY 1998 received from the DSNY Bureau of Cleaning and Collection along with a contingency allowance. The average peak collection day is the annual average of the highest weekly waste delivery day over 52 weeks and typically occurs on Tuesdays. The contingency allowance provides a margin of conservatism for environmental review purposes by generally using higher Average Peak Day tonnages than indicated by the historical data.

The waste throughput capacity available in the MTS design reflects the fact that the four MTSs are part of the overall DSNY long-term export waste management system that will also incorporate several private transfer stations to containerize DSNY-managed Waste for export via a barge and/or rail. As an element of this system, each facility must provide a margin of capacity that gives DSNY the flexibility to deal with: (i) future growth in waste generation as a function of population increases over the period of the SWMP; (ii) upset condition at any given facility, e.g., an equipment outage that would result in the need for waste flow to be temporarily redistributed among nearby facilities; and (iii) a public emergency, such as a heavy blizzard that leaves a backlog of waste on the curb that must be moved through the system as rapidly as possible once roads are clear.

For the East 91st Street Converted MTS, based on an evaluation of more recent waste generation data for FY 2003 and FY 2004, DSNY has determined that:

- The average weekly generation of DSNY-managed Waste in the East 91st Street wasteshed is approximately 4,320 tons, or an average of 720 tpd;
- The Average Peak Day[8] is 864 tons;
- The arrival of collection vehicles that correlates with average and peak tonnages will be between 75 and 129 per day;
- The peak hour arrival rate for the East 91st Street MTS will be 28 collection vehicles; and
- The holiday week peak day is 1,080 tons.[9]

Table 2-1 presents the above mentioned information on the waste flows for DSNY-managed Waste that DSNY would expect to process at the MTS under various scenarios that are typical of DSNY operations. Additionally, the 780 ton maximum daily amount of Commercial Waste that would be delivered by private carters to the MTS, consistent with the analysis of off-site impacts in the FEIS, is listed in the table. Finally, the maximum daily tonnage based on off-site impact

[8] The average peak collection day is the annual average of the highest weekly waste delivery day over 52 weeks and typically occurs on Tuesdays.

[9] The holiday week peak day reflects much higher volumes of waste collected during post holiday weeks (5 rather than 6 collection days), but does not account for the occasional emergency events, such as heavy snow storms, that leave a backlog of uncollected waste on the street, because collection vehicles have been diverted to snow plowing operations. In these instances, daily collection and disposal of waste after a storm event can exceed the holiday week peak day.

analyses for traffic, air quality, odor and noise as evaluated in the FEIS is also provided. The table notes, following Table 2-1, provide additional information on the sources, underlying assumptions and application of the data in the table.

The SWMP authorizes the processing of commercial putrescible waste using available capacity in the facility. Putrescible Commercial Waste would be delivered by licensed private carters to the facility.

Table 2-1
East 91st Street Converted MTS
DSNY and Commercial Waste Anticipated Capacity Requirements
and
Capacities Evaluated in the New SWMP FEIS

	DSNY-Managed Waste				
Converted MTS Location	**DSNY Average TPD[1]**	**Average Peak Day TPD[2]**	**DSNY Holiday Week Peak TPD[3]**	**Potential Commercial Waste (Noise Constrained) TPD[4]**	**Maximum Daily Waste Evaluated in FEIS for Off-Site Impacts (TPD)[5]**
East 91st Street	720	864	1,080	780	1,873

Notes:

(1) The DSNY average ton per day (TPD) values are based upon an analysis of the historical volumes of DSNY-managed Waste generated annually averaged over 302 days per year in the respective MTS wasteshed.

(2) The Average Peak Day (TPD) in Column 2 is approximately 20% higher than the Average Day and reflects the daily and seasonal variability in DSNY's weekly collections as well as the potential growth waste generated over time, as a function of future population growth.

(3) DSNY experiences a holiday week collection peak day, Column 3, when a scheduled holiday reduces six days of collection activity to five days. Post-holiday day peak day collections can be approximately 50% above the annual average day.

(4) Column 4 is the quantity of Commercial Waste that could be processed during the 8:00 p.m. to 8:00 a.m. time period without causing off-site noise impacts and was presented in the Summary Report in Volume III of the Commercial Waste Management Study, and also reevaluated in the FEIS. This 8:00 p.m. to 8:00 a.m. time period is the period when commercial carters collect waste in the City and DSNY collection operations are at their lowest volume. Local Law 74 of 2000 directed that DSNY evaluate the potential to process commercial waste at the MTSs.

Notes from Table 2-1, continued

(5) The Maximum Daily Tonnage Evaluated in the FEIS for Off-Site Impacts, Column 5, is the sum of data derived from the following sources and methods: (i) as reported in Table 2.1-2, page 2-11, of the FEIS, a calculated value from a sample of available, historical 1998 data for the Average Peak Day for DSNY-managed Waste in the Converted MTS wasteshed plus a 20% contingency allowance that reflects variations in the waste stream and a margin of conservatism in the analysis of the potential for significant adverse *off-site* impacts related to traffic, air quality, and noise (essentially DSNY collection vehicle traffic to and from the Converted MTS); and (ii) the Commercial Waste Tonnage identified in Column 4.

DSNY has conducted extensive analyses of the potential to containerize Commercial Waste at the MTS. These analyses include as an environmental review of the potential for significant adverse impacts associated with containerizing Commercial Waste at the Converted MTS in the Final Environmental Impact Statement (FEIS)[10] prepared to support adoption of the SWMP[11]. . These analyses were based on following assumptions:

- All capacity from 8:00 a.m. to 8:00 p.m. would be reserved for delivery of DSNY-managed Waste.
- Commercial Waste deliveries would occur only from 8:00 p.m. to 8:00 a.m.
- Commercial collection vehicles would deliver an average of 11 tons per vehicle.
- Commercial Waste deliveries would not exceed the hourly waste processing capacity of each Converted MTS, thus Commercial Waste would not be stockpiled at the Converted MTSs.

Based on the above and assuming that DSNY-managed Waste deliveries from 8:00 p.m. to 8:00 a.m. would approximate 17 tons under its average peak day assumptions, the MTS has approximately 2,183 tons of available capacity during this time period. The environmental reviews determined that 781 tons of this available capacity could be used to containerize commercial putrescible waste without causing significant adverse impacts. This would entail receiving an average of 71 commercial collection vehicles during this time period. The maximum number of DSNY and commercial collection vehicles during the peak hour of this 12-hour period would be approximately 19 to 21.

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[10] The FEIS was prepared to support the adoption of the SWMP, inclusive of the Proposed Actions for Commercial Waste described in Chapter 4 of the SWMP, which also describes new initiatives applicable to Commercial Waste that will be implemented under existing programs. Chapter 3 of the SWMP describes the Proposed Actions that are germane to the permit applications pending before the NYSDEC. The Commercial Waste Management Study was prepared pursuant to Local Law 74 of 2000 and provides extensive information on and analysis of the City's existing Commercial Waste management system.

[11] See section 6.18 of the FEIS.

All waste delivered to the East 91st Street MTS will be containerized in special-purpose, open-top-loaded containers that have a tare weight of approximately 5.25 tons and a capacity of approximately 62 cubic yards. The containers will hold an average net payload of 20 to 22 tons. The containers, similar to those currently manufactured by Accurate Industries in Erial, New Jersey, and used in intermodal waste hauling operations at the Harlem River Yard transfer station in the Bronx and at other transfer stations throughout the country, are fabricated to American Bureau of Shipping (ABS) standards and bear the International Convention for Safe Containers (CSC) Approval Plate. The containers will be top loaded at the MTS and unloaded at the disposal facility by tipping the container with the end door open. The exterior dimensions of the containers will allow them to be lifted using International Standards Organization (ISO) standard spreader assemblies that twist-lock the container to a platform or another container during transport. The lids and rear door assemblies of the containers are fitted with gaskets to provide leak-proof and watertight seals. A drawing depicting the current container design by Accurate Industries and an example container performance specification meeting ABS standards is provided in Appendix D, Attachment 7.

The MTS pier has space to moor one barge on the east end of the building where unloading and loading activities will occur. The empty barge will be moored with a conventional mooring system employing synthetic lines secured to Cleats on the pier. Empty/full containers will be moved off/on the barge. Due to the strong currents in the East River, hand shifting of barges will not be performed at this MTS. Therefore, once the barge is full, the barge will be removed by tugboat to enable another barge to be put in place, by tug, to begin unloading/loading operations. A full flat deck barge, with the capacity to hold 48 containers, will have an average net payload of 1,056 tons and a gross payload (including waste and container weights combined) of 1,308 tons. See Sheet 73 in Appendix J – Engineering Drawings, for more details on the proposed flat deck barge design. The MTS's peak design capacity will require approximately five barge shifts daily to transfer full containers from the MTS to: (i) an intermodal transfer point, where the containers will be transloaded to railcars or an ocean- or coastal-going barge for transport to the disposal destination; or (ii) a disposal facility. The barge will be loaded with empty containers for return delivery to the MTS. See Section 3.2 for more detail on barge destination and intermodal container transfer operations. See Sheets 73 and 75 in Appendix J – Engineering Drawings for more details concerning barge mooring at the MTS.

2.1.3 Access Road and Ramp

The access and service road layout at the East 91st Street MTS will accommodate the expected traffic flow, including peak flow and future growth. DSNY, other City agency collection vehicles and authorized private carters (collection vehicles) will enter the East 91st Street MTS via East 91st Street. The vehicle access ramp will be located on the southern border of the DSNY property line. The two-lane access/egress ramp will have an inbound lane with space for queuing up to 19 collection vehicles. Collection vehicles will not be allowed to idle for longer than three minutes. Further details on truck idling compliance can be found in Section 2.3.2 – Truck Receiving. Collection vehicles will proceed up the ramp to an elevated tipping floor for weigh-in on an inbound scale located at the top of the ramp, inside the building. Since the inbound scale will be equipped to process up to approximately 36 vehicles during a peak hour, the expected peak hour volume of DSNY-managed Waste deliveries (28 vehicles) will be easily accommodated. A pair of red and green traffic-type lights will be provided at the entry end of the inbound scale that will be manually operated. The lights will provide the station with a method of controlling the number of trucks on the tipping floor at any one time.

The ramp will be constructed of reinforced concrete paved with asphalt and designed with a pavement thickness capable of withstanding the expected loads associated with the operation of the East 91st Street MTS. The ramp will be sloped to facilitate drainage. To accommodate stormwater runoff, catch basins and under-slab piping will be provided. In addition, due to the nature of the three-level Converted MTS design, particularly those built completely over water, piping will be run above ground by supporting the pipe underneath the truck ramps.

2.1.4 Processing Building

The entire enclosed processing building, consisting of the tipping floor, a loading level and pier level that includes the lidding area, will be maintained under negative pressure via roof exhaust fans, in accordance with City Building Code requirements. (For further details see Appendix G – Engineering Calculations, Attachment 2, Ventilation Calculations.) The footprint of the three-level building, not including the pier, will be approximately 200 feet long by 205 feet wide. As shown in Sheets 15through 18 in Appendix J – Engineering Drawings, the

processing building will have the following three levels: an uppermost tipping floor, a middle level loading floor, and an indoor lidding area located on the lower most level (pier level). Space is also allocated in the building for scale monitoring, administration and personnel areas. All waste processing will occur within enclosed spaces in the building. See Section 2.1.4.7.5 for a discussion of ventilation systems.

2.1.4.1 Tipping Floor

The enclosed tipping floor will be approximately 80 feet long, 200 feet wide, at an elevation 28 feet above pier level, and will have an elevated cast-in-place floor system (see Sheets 16 and 20 in Appendix J – Engineering Drawings). This tipping floor will be at an elevation of 12 feet above the loading floor. A total of six tipping bays will be available for trucks to unload simultaneously within the tipping floor. The size and geometry of the tipping floor and the location of the tipping bays are sufficient to allow trucks to safely maneuver into and out of the tipping bays. Lights at each tipping bay will identify which bay is available to the truck driver. In addition, DSNY personnel will be present on the tipping floor to direct truck drivers. The separation in elevation between the tipping floor and the loading floor levels will expedite unloading operations.

Two high speed 14-foot-high overhead roll-up doors, one for each of the inbound and outbound lanes, will be opened for DSNY and other City agency collection vehicles for access to and egress from the elevated tipping floor. Detection devices (height logs) will be installed in each tipping bay to prevent collection vehicles from backing off of the tipping floor level (see Sheet 16 in Appendix J – Engineering Drawings). Each tipping bay will also be equipped with a photocell to detect entry of the truck and trigger the dust suppression system for that truck bay (see Sheets 86 and 67 in Appendix J – Engineering Drawings, for further details on the dust control system).

The outbound scale is located at the base of the ramp. Floor drainage from the tipping floor will be collected by trench drains and discharged into the City sewage system after passing through an oil/water separator. Workers will visually inspect the loads to ensure that no unauthorized waste is unloaded at the East 91st Street MTS. Further details regarding unauthorized waste procedures can be found in Section 2.2.2 – Unauthorized Waste Control Plan, Section 3.2 – Waste Disposal, and Appendix B – Contingency Plan, Section 6.2, Unauthorized Waste.

Waste delivery truck tires will not be cleaned/washed on site before exiting the facility. Since the tipping floor is elevated above the loading floor and the waste will be tipped directly onto the loading floor, there will be little chance of the trucks coming in contact with waste on the tipping floor and tracking this waste out of the facility. In the event that waste or leachate collects on the tipping floor, it will be cleaned immediately in an effort to prevent the generation and/or tracking of leachate. The tipping floor will be cleaned each day that waste is delivered. In addition, a vacuum sweeper will be used to routinely wash the tipping floor of mud and other debris that may be tracked onto the floor from outside.

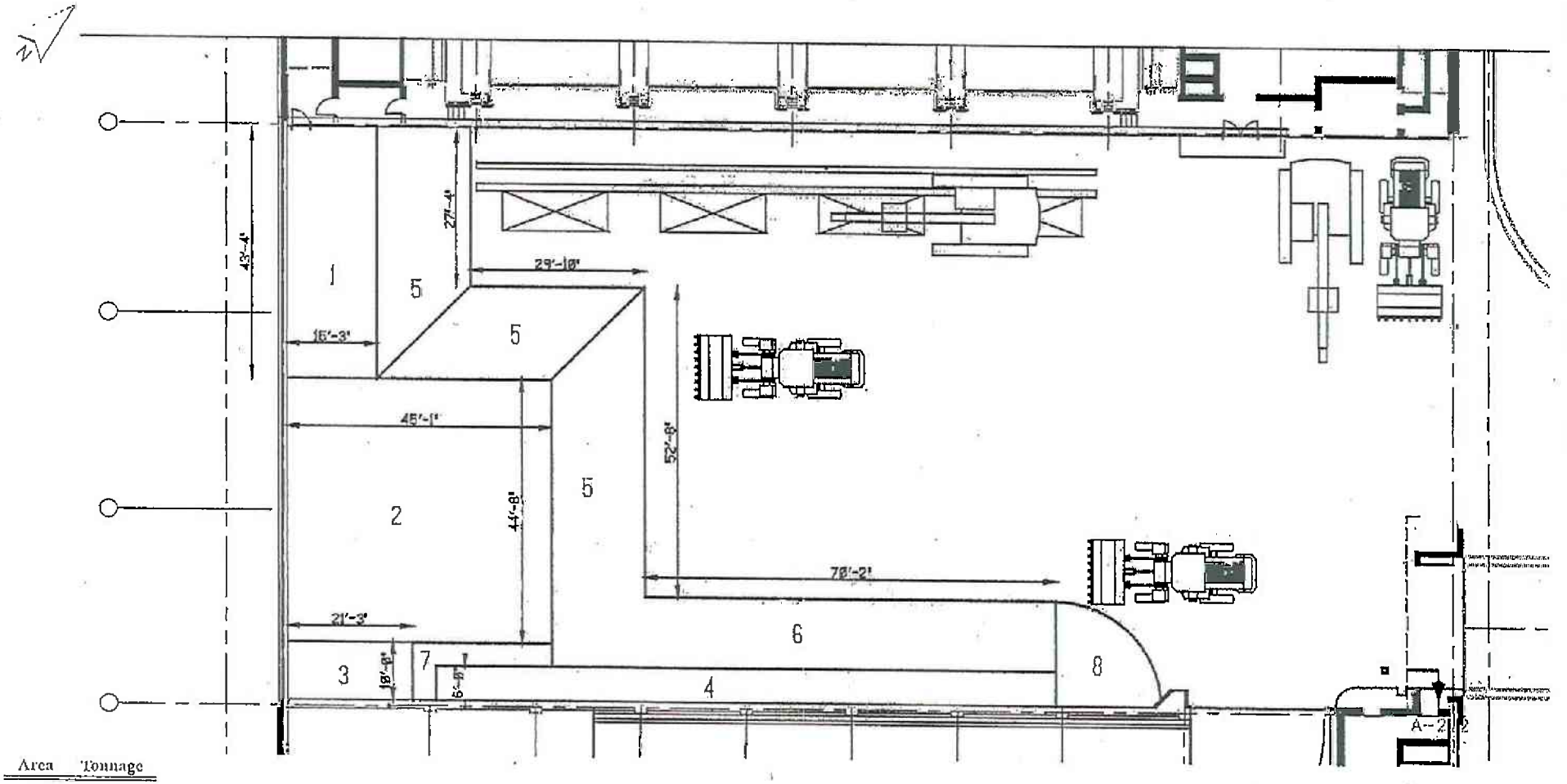
2.1.4.2 Loading Floor

The loading floor will be approximately 100 feet long and 200 feet wide (see Sheets 16 and 20 in Appendix J – Engineering Drawings). Four loading slots that are approximately 20 feet long and 7.5 feet wide will provide for through-the-floor loading of waste into the open-top-loaded containers located beneath the loading floor. Collection vehicles will unload waste onto the loading floor below the tipping bay. Two wheeled loaders will sort, store and load the waste from the tipping floor. The waste will be maneuvered by the loaders from its location beneath the tipping bay either: (1) directly into a slot with an available container below; or (2) during peak arrival times into storage piles on the loading floor when waste is received at a faster rate than the filling of containers. Signal lights above each slot will inform the loader operators which slot is available for loading.

While a container beneath the slot is being filled, an excavator will be tamping down the waste in the container to compress it and allow for each container to hold 20 to 22 tons of waste. An on-board scale located on the container transport system will be used to determine the weight of the waste, and this weight will be displayed above each slot on the loading floor to notify the loader and tamper operators when the container is full.

The building shell will be a pre-engineered metal building structure with skylights on the roof and translucent panels located on the walls near the roof level to provide natural light. Metal panel walls will be used above the cast-in-place push walls/protection walls. Push walls that are approximately 17 feet high above the floor level will be located on the north, east and west sides and the south side corners of the loading floor. The rounded corners of the push walls will facilitate the movements of the front-end loader, and the walls will be covered with steel plates.

The loading floor will be constructed of high-strength concrete and covered with a sealer to prevent moisture intrusion. Near the loading slot in-feed areas, and any other high wear areas, the tipping floor will be covered with an additive to increase the strength and durability of the wearing layer. The loading floor will have storage capacity for 634 tons of waste. Figure 2-1 outlines areas on the loading floor allocated to waste storage; supporting waste storage calculations are provided in Appendix G – Engineering Calculations. A dumpster that is approximately 40 cubic yards will be located on the loading floor for handling and storing non-hazardous unauthorized and bulky waste (see Sheet 16 in Appendix J – Engineering Drawings, for the location of the 40-cubic-yard dumpster). A ramp located at the northeast corner of the loading floor will provide access for equipment into and out of the processing building. The ramp will be constructed of reinforced concrete paved with asphalt and designed with a pavement thickness capable of withstanding the expected loads associated with the operation of the East 91st Street MTS. There will be one high speed roll-up door at the entrance from the ramp to the loading level. This door will remain closed unless vehicles need to access or leave the loading level.



Area	Tonnage
1	88.1
2	268.6
3	28.3
4	63.6
5	117.2
6	42.1
7	13.9
8	12.3
	634.1 Tons

General Note: See Appendix G - Engineering Calculations, Attachment 1 - Waste Storage Calculations for Further Detail.

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Figure 2-1 Typical Marine Transfer Station Waste Storage Piles
East 91st Street Marine Transfer Station

CITY OF NEW YORK
DEPARTMENT OF SANITATION

2.1.4.3 Container Loadout Area

The container loadout area located on the pier level elevation of the building will be approximately 33 feet long, 200 feet wide, and located at an elevation of approximately 16 feet directly below the loading floor (see Sheets 16 through 21 in Appendix J – Engineering Drawings). The external dimensions of the open-top-loaded containers will be 20 feet long, 8.5 feet wide and 12 feet high. They will have an interior volume of approximately 62 cubic yards.

The containers will be located directly below the loading slots on the loadout floor and situated on shuttle cars that move containers into and out of the container loadout area by battery-operated carriages. Movement of the shuttle cars will be directed by the DSNY personnel performing the lidding. There will be sufficient clearance provided between the top of the container and the bottom of the loading floor. A scale will be provided for each shuttle car in the loadout area to record the weight of the full container. Behind each loading slot, a digital display located on the loading floor wall will indicate the cumulative amount of waste being loaded into each container; this measure will assist in preventing the loading of excess weight into containers. In addition, the shuttle cars will be equipped with indicating lights that will be visible to the gantry crane operator. The indicating lights will be interlocked with the scale system and will indicate either a full or empty container. The amount of waste per container will be approximately 20 to 22 tons.

2.1.4.4 Container Lidding Area

The enclosed container lidding area will be approximately 24 feet long and 185 feet wide, and located at the same elevation as the container loadout area and pier (see Sheets 16 and 21 in Appendix J – Engineering Drawings). Empty containers will be moved into the lidding area building by battery-operated shuttle cars traveling on tracks through one of four 15-foot-high-by-22-foot-wide overhead roll-up doors. After the container moves into the lidding/delidding area within the transfer station, the operators stationed at the intermediate platform will signal for the outer pier level door to close. At the same time, the operators will signal the spreader

mechanism to lower onto the lid. Once positioned and locked onto the lid, the pins will either be removed by a DSNY employee or by an automatic latching mechanism that will release the lid from the container and raise the lid, leaving it suspended about 36 inches above the container. After the lid is removed, both operators will move off the shuttle car platform before the container is moved underneath the loading slot to further enhance operator safety and process control. Sheets 16 and 21 in Appendix J – Engineering Drawings highlight the lidding/delidding operations.

After a loaded container is lidded, the overhead roll-up door will open and the shuttle cars will be pulled onto the pier level. The ventilation system in the container loading and lidding areas will be kept under sufficient negative pressure to keep loose waste and debris from escaping the building when the roll-up doors are open. In addition to the ventilation system, the roll-up doors will be designed to rapidly open and then close. For further details regarding the ventilation system, see Appendix G – Engineering Calculations, Attachment 2, Ventilation Calculations.

The Spreader Hoisting System incorporates two supporting I-beams mounted to the structure above the lidding/delidding area. The support beams shall be sized to support the weight of the entire assembly including the container lid, and be located lining up with the end of the spreader in the longitudinal direction. These beams serve as support members for four hydraulic lift cylinders that are hung from them. Twelve-inch stroke hydraulic cylinders shall be attached to a spreader lift assembly. The spreader shall be constructed of steel, and meet ISO standards. It will be designed to attach itself to the container's lid, and lock onto it. Up to 12 inches of travel adjustment shall be designed into the spreader assembly to compensate for any container not being positioned properly. Details of the spreader hoisting system are provided as an attachment in Appendix D – Operations and Maintenance Plan.

The spreader will have the ability to release a locking/latching assembly at four fixed locations on the container lid. Indicating lights will signal to the operators on the platform that the lid is loose and can be lifted off of the container. Once released, the operator will raise the lid where it will remain until the full container is returned to the lidding/delidding area where the lid will be

reconnected to the container. Once secure, the rubber-gasketed lids as well as the gasketed rear door provide a watertight and leak-proof seal to the containers. The containers will be designed in compliance with ABS standards.

Emergency stop pushbuttons shall be located in the Operations Room located above the lidding operation. At any time, during the movement or handling of the container, lidding/delidding, waste loading or lifting operation associated with the containerization of waste, a supervisor located in the Operations Room can stop the container handling process.

2.1.4.5 Pier (Barge Loadout Area)

The pier will be approximately 88 feet long and 220 feet wide, and located at the same elevation as the lidding and container loadout areas (see Sheets 15, 18, 19 and 21 in Appendix J – Engineering Drawings). Pier level operations, including but not limited to barge handling and container loading/unloading will be performed by a qualified outside contractor hired by DSNY. Two gantry cranes, one of which will be available as a spare, will be located on the pier level. A gantry crane will pick up an empty container from a barge that is moored adjacent to the pier and will place it on an empty shuttle car located at the end of the pier. After placement, the battery-operated shuttle car will move the container into the lidding area. The access door to the lidding area will be interlocked with the shuttle car system to open when the shuttle car approaches the building. The gantry crane will also be used to move full containers from the shuttle cars onto the barge. Sheet 19 in Appendix J – Engineering Drawings shows that the pier level will have 24 designated spaces, stacked 2 high, for a capacity of 48 full or empty containers. There are also four reserved container spaces for damaged containers. Any container found to be leaking or damaged will be taken out of service and placed in one of the four designated spaces on the pier to ensure that damaged containers are not accidentally put back into service (see Sheet 19 in Appendix J – Engineering Drawings for damaged container pier storage locations) and will be transported to and repaired at a contractor facility. Sheet 19 in Appendix J – Engineering Drawings also shows four container slots labeled "Transfer Car Container," which will serve as the designated buffered area to temporarily accommodate up to eight containers (4 X 2 high) while empty containers wait for loading onto a shuttle car. In addition, the pier has four reserved

slots for spare lids, damaged lids, crane spare spreader and lidding crane spare spreader, as shown in Sheet 19 in Appendix J – Engineering Drawings. Further details regarding removal and transportation of damaged containers to the contractor's maintenance facility will be available upon the completion of the procurement process. For further information, see Appendix I – Transfer, Transport and Disposal Plan.

2.1.4.6 East 91st Street MTS Life Expectancy

The East 91st Street MTS structure will be maintained, including major refurbishments as required, in order to operate as a container export facility for as long as it is required for the Long Term Export Program. If maintained properly, a facility of this nature will typically have a life expectancy close to 50 years. Major equipment, such as cranes, shuttle cars, barges, tugs, etc., is expected to last around 20 years. Mobile equipment, such as front-end loaders, forklifts, sweepers, etc., is expected to last around 8 years.

2.1.4.7 Machinery and Equipment

2.1.4.7.1 Scales

The East 91st Street MTS will be equipped with two 30-foot-long-by-10-foot-wide truck scales, one to weigh inbound refuse trucks and the other to weigh outbound trucks (see Sheet 88 in Appendix J – Engineering Drawings). The scales will be equipped with a scale data collection system. Each scale includes a radio frequency identifier which identifies each truck as it approaches the scale. Information recorded from each truck will include the date and time as well as the unique truck identifier. Gross vehicle weight will be recorded on both the inbound and outbound trips. The unique truck identifier allows additional information to be pulled from a database, such as vehicle type, size, volume and tare weight. The scale data collection system will include dedicated computer systems to monitor the scale systems, update administrative tables, upload data on request, print duplicate receipts and produce reports locally from each scale station and from remote administration offices via dial-up modem. See Appendix D, Section 4.2 – Scales for a more detailed description of the scale system at the MTS.

Additional components to the scale data collection system will also include traffic control lights or barriers to control access to the scale. The data collection system will include Windows-compatible scale vendor-supplied software. The software will include capabilities for data entry for truck information. The software includes the capacity to create standard reports as well as a report-writing package used to develop custom reports.

The East 91st Street MTS will be equipped with a stationary radiation detection system to monitor for unacceptable levels of radioactive material. The detectors will be located before the inbound truck scale. The detection system will include two detector assemblies and additional electronics for detection and recording. Information from the detection system will be sent to a personal computer and integrated into the weigh scale database. Details concerning the radioactive waste detection equipment are provided in Appendix D – Operations and Maintenance Plan, Section 4.8, Radiation Detection System, and Attachment 11 – Radiation Detector Specifications, and in Sheet 88 in Appendix J – Engineering Drawings. Details concerning DSNY procedures for handling radioactive waste are provided in Appendix B – Contingency Plan, Section 6.2.2, Radioactive Waste.

Scales will also be supplied with each shuttle car system for container weighing. The scale output will be available to the loading crew to determine the fullness of the container. (See Appendix D – Operations and Maintenance Plan, for details concerning the shuttle car system.)

2.1.4.7.2 Container ID Recording System

An electronic bar code system will be provided to log and track empty and full containers coming into and out of the East 91st Street MTS.

2.1.4.7.3 Processing Equipment

Table 2-2 provides a description of the types of processing equipment likely to be used to support the operation of the East 91st Street MTS. Specification sheets for some listed items are included in Appendix D – Operations and Maintenance Plan.

Table 2-2
Processing Equipment[1]

Item (Quantity)	Manufacturer	Model No.	Function
Double Cantilever Gantry Crane (1 per MTS with 1 spare)	To Be Determined	N/A	Loading and unloading empty/full containers from barges.
Shuttle Car (4)	Mentor AGVS; Pacific Central Steel Fabricators & Erectors, Inc.; or Ederer, LLC	N/A	Moving empty/full containers between the pier level and the processing building.
Spreader Hoisting System (4)	Wastequip Accurate or Elme North America, Inc.	N/A	Removing and replacing container lids.
Open-Top-Loaded Container	Wastequip Accurate or Elme North America, Inc.	I-62/OT	Storing and transporting municipal solid waste.

Notes:
[1] The MTS will employ the stated equipment and/or its equivalent.
N/A= Not Available.

2.1.4.7.4 On-Site Mobile Equipment

Table 2-3 provides a description of the various types of on-site mobile equipment likely to be used to support operations. Specification sheets for some listed items are included in Appendix D – Operations and Maintenance Plan.

All on-site mobile equipment will comply with noise and emission requirements as specified in the Final Environmental Impact Statement (FEIS).

Table 2-3
On-Site Mobile Equipment[1]

Item (Quantity)	Manufacturer	Model No.	Function
Wheel Loader (2)	Caterpillar	966G Series II	Pushing waste, managing waste storage piles.
Tamping Crane (1)	Caterpillar	325C	Waste distributing and tamping in containers.
Skid-Steer Loader (1)	Bobcat, Deere or Caterpillar	S300, 270 II or 262B, respectively	Removing litter from the container lidding and load-out area.
Mini Vacuum Sweeper (1)	Green Machine	525	Cleaning litter spillage from inside of container loadout area.
Bucket Lift (1)	Genie	Z-30/20N; Z-34/22 or Z-45/25	General building maintenance, such as replacing lighting or dust control system nozzles.
Scissor Lift	Genie	GS-2032; GS-2668 or GS-3268	General building maintenance, such as replacing lighting or dust control system nozzles.
Large Forklift	Clark or Yale	CMP60; CGC60 or GC-MJ	Handling heavy items on the pier level required for crane maintenance (cable reels, spreader, etc.).
Medium Forklift	Clark or Yale	ECG32; C35L or GC-LJ	Handling items within the MTSs for maintenance purposes.
Barges	N/A	N/A	Transferring empty and full waste containers to and from the facilities.
Tugboats	N/A	N/A	Transferring empty and full barges to and from the facilities.

Notes:
[1] The MTS will employ the stated equipment and/or its equivalent.
N/A= Not Available.

2.1.4.7.5 *Ventilation*

Centrifugal supply fans interlocked with associated in-line and propeller exhaust fans will provide continuous mechanical ventilation for the processing areas. The fans will be designed to supply 100% outdoor air.

The tipping and loading floor will be equipped with in-line supply air fans, exhaust air fans and related ductwork to maintain the required minimum number of air changes per hour (ACH). The tipping and loading areas will have three separate supply and exhaust systems, each sized for up to 12 ACH. These systems provide redundancy, have the ability to reduce ventilation during very cold weather and ensure that supply velocity is sufficient to "throw" supply air to the building extremities even when running at reduced ventilation capacity. The lidding area will also be designed for up to 12 ACH with two-speed supply and exhaust fans. No heating will be provided for the tipping and loading areas and lidding areas. Natural gas-fired infrared heaters will provide heat in the lidding area.

The enclosed areas of the pier level is also served by supply and exhaust fans located on the equipment mezzanine. They are designed to supply and exhaust 6 to 12 ACH of unheated supply air.

The air ventilation system will also be used to circulate air within the processing building and to control the levels of vehicle exhaust contained within the building. In addition to the ventilation system supplying adequate air changes, a gas detection system will also be provided on both the tipping and loading floors to monitor carbon monoxide and nitrogen oxide fumes from collection vehicles and mobile equipment operating in these areas. Alarms for the gas detection sensors will be wired to a central alarm panel located in the Operations Room. Sheets 22 through 42 in Appendix J – Engineering Drawings, provide additional details concerning the Heating, Ventilation and Air Conditioning (HVAC) systems at the East 91st Street MTS.

The tipping floor and loading level doors will be kept closed when collection vehicles are not entering/exiting the building. The ventilation blowers will be equipped with a dust (atomized water spray) and odor control (atomized mist deodorant) system to remove dust and odors from the inside of the MTS when waste is being tipped and processed. The odor control system will

BENJAMIN J. KALLOS
NEW YORK CITY COUNCIL MEMBER
DISTRICT 5, MANHATTAN

Gladstein, Neandross & Associates. *Addressing Community Concerns at the East 91st Street MTS*. 9 May 2014. New GNA Analysis for the Asphalt Green/Pledge 2 Protect Bus Tour

Addressing Community Concerns at the East 91st Street MTS

New GNA Analysis for the Asphalt Green/Pledge 2 Protect Bus Tour

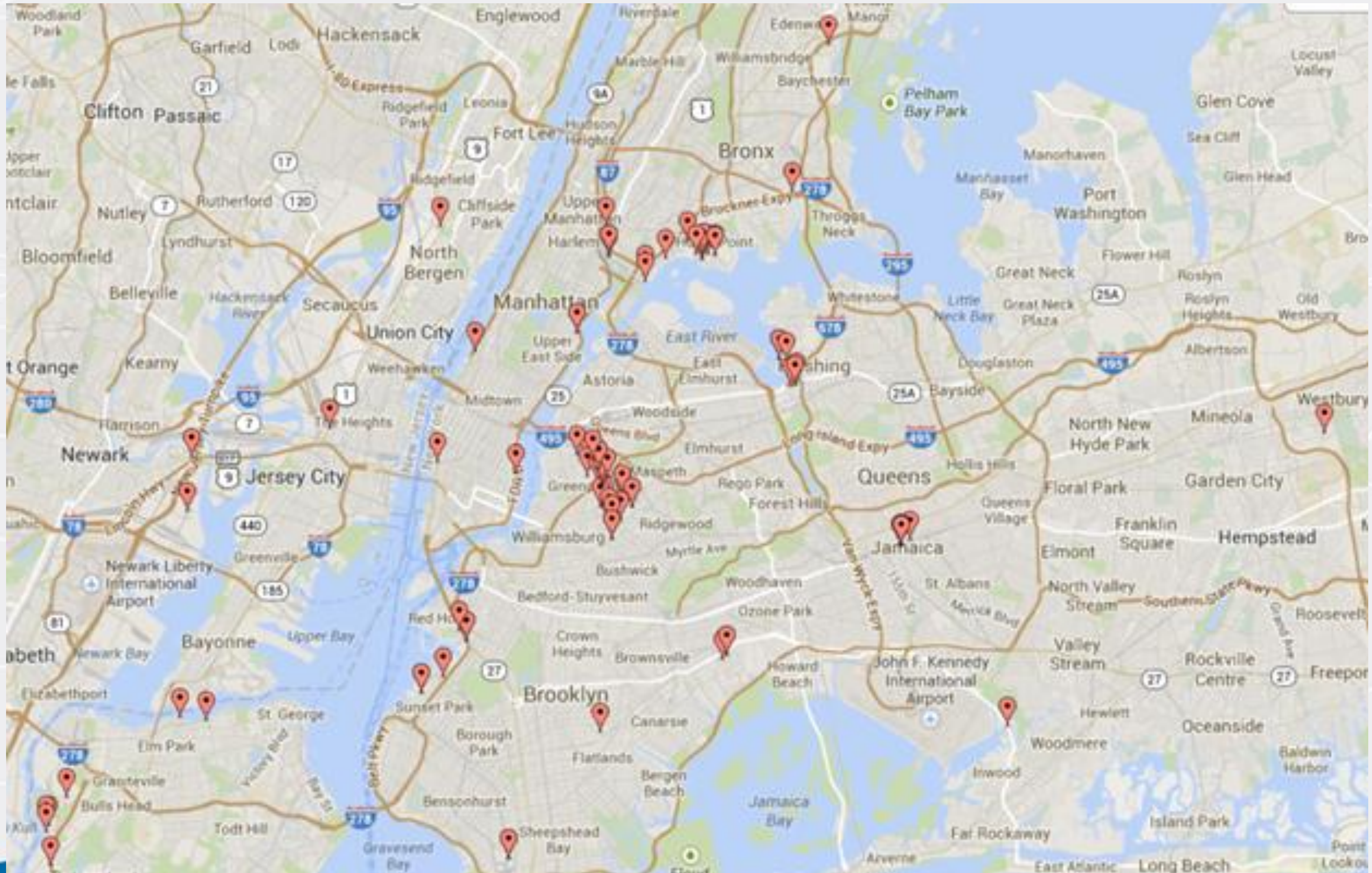
May 9, 2014

Introduction

We Can All Agree That…

- New York City needs a long-term, sustainable solid waste approach that:
  - Is cost-effective
  - Reduces truck traffic, air pollution, and other environmental impacts
  - Provides provide relief to disproportionately burdened communities
  - Is flexible enough to incorporate new technologies and approaches that lower costs and increase the sustainability of the overall system over time

The Current System Creates Disproportionate Impacts



GLADSTEIN, NEANDROSS & ASSOCIATES

CLEAN TRANSPORTATION AND ENERGY CONSULTANTS

Will The East 91st Street MTS Solve This Problem?

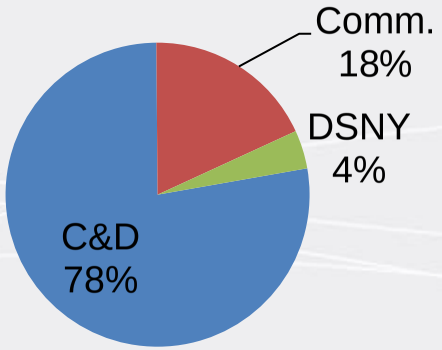
Long-Haul Trucking is Reduced, But More than 80% of Truck Miles Are Unchanged by the SWMP

Source	Baseline Annual Mileage	SWMP Scenario Annual Mileage	Reduction of Miles by Using SWMP	% Reduction of Truck Miles
DSNY-Managed	17,083,639	16,727,669	355,970	2.08%
Commercial (non-C&D)	51,372,000	51,201,610	170,390	0.33%
Export via Long-Haul Trucks	3,977,809	1,822,729	2,155,080	54.18%
Tug Boats	0	108,360	-108,360 (i.e., increase of mileage)	N/A
Total	**72,433,448**	**69,860,368**	**2,573,080**	**3.55%**

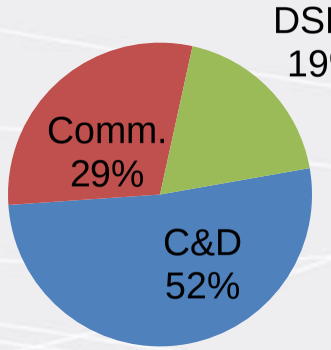
Most Non-Manhattan Waste is Construction and Demolition Debris

Note: East 91st Street MTS will not accept C & D waste

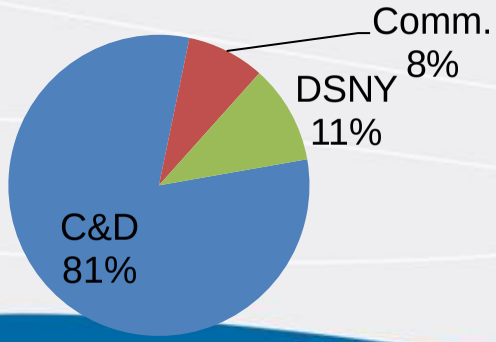
Bronx Capacity (% of tpd)



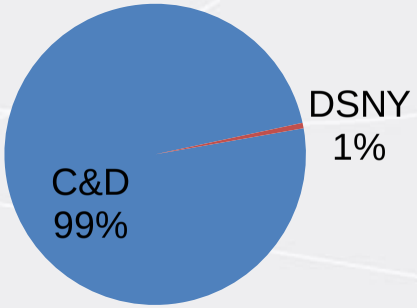
Brooklyn Capacity (% of tpd)



Queens Capacity (% of tpd)



Staten Island Capacity (% of tpd)



Manhattan Residential Waste Does Not Impact Brooklyn, Queens, or the Bronx communities

- All Manhattan residential waste is trucked to New Jersey or Yonkers by DSNY trucks
- To get to Yonkers, trucks use highways, not neighborhood streets
- East 91st Street MTS will not divert DSNY trucks from Brooklyn, Queens, or Bronx transfer stations

Commercial Waste at East 91st Street MTS Won't Reduce Disproportionate Impacts

- At its maximum permitted tonnage, E91 MTS will receive 780 tpd—roughly 78 trucks on average
- City has more than 4,000 commercial waste-hauling trucks daily
- East 91st Street MTS truck diversions will not be enough to be perceptible at community level

Manhattan's Commercial Waste Destinations	Estimated Percentage Received	Potential Reduction in Average # of Trucks/Day
New Jersey	50%	39
Bronx	25%	19
Queens	12.5%	10
Brooklyn	12.5%	10
Staten Island	0%	0

The East 91st Street MTS Will Create Significant New Impacts at Asphalt Green and the Surrounding Community

East 91st Street MTS will impact more people, parks and schools than any other station

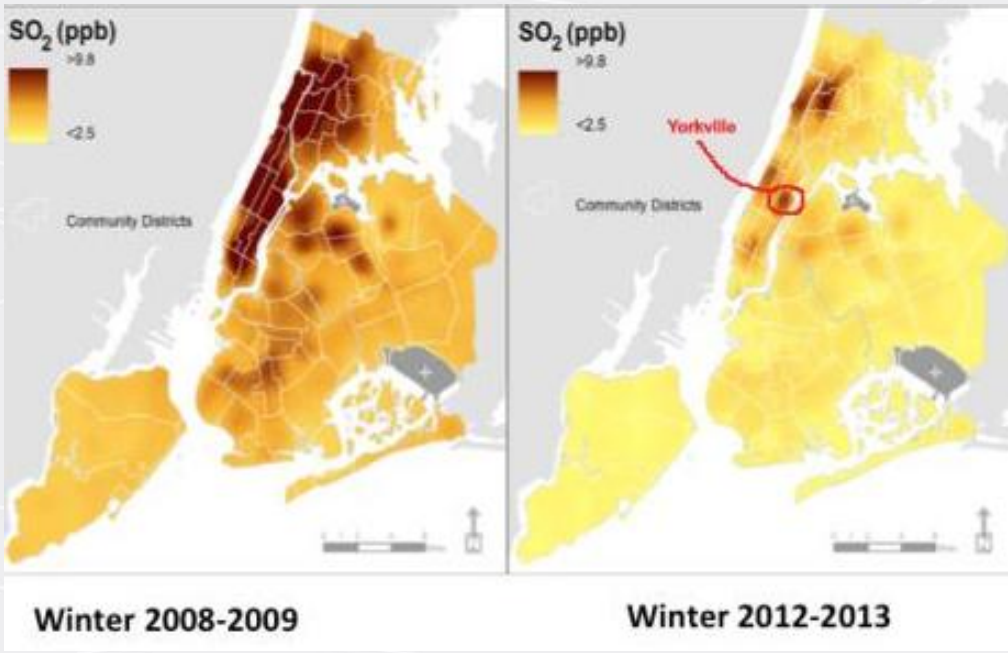
Transfer Station	Residents	Children	People of Color	Schools	Acres of Parks	Public Housing Units
East 91 Street, Manhattan	22,056	1.059	6,755	6	10.6	1,173
SW Brooklyn	2,778	148	1,432	2	2.2	0
NS Queens	661	38	477	1	0.2	0
Hamilton Ave, Brooklyn	2,312	86	1,408	0	1.9	0
Gansevoort, Chelsea	4.677	176	828	1	3.9	0
West 59th, Manhattan	6,873	335	4,164	3	5.2	33
Lincoln Ave, Bronx	5,086	849	3,881	1	3.6	975
Varick Ave, Brooklyn	0	0	0	0	0	0
State Island Waste Transfer Station	0	0	0	0	0	0

The East 91st Street MTS is Within 400 Feet of Parkland and Residences

- Section 4-32 of Title 16:
  - "Any new transfer station shall be at least 400 feet from a residential district, hospital, public park or school."
- The East 91st Street MTS is a grandfathered nonconforming use
- Nevertheless, the growth of the residential population and the success of Asphalt Green suggests the City should have found a better location

The East 91st Street MTS is Located in One of the Few Remaining SO_2 Hotspots

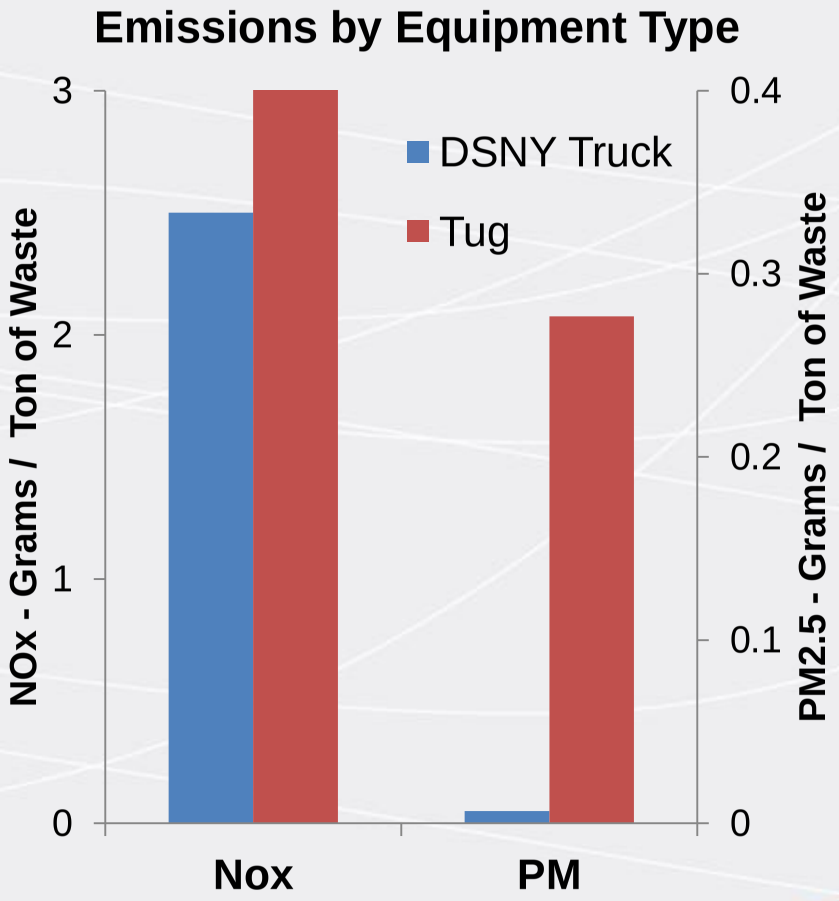
- Sulfur dioxide (SO_2) concentrations have dropped since 2009 citywide
- SO_2 hotspots still exist in Yorkville and East Harlem
- None of the City's other MTS locations are in SO_2 hotspots



Source: New York City Community Air Survey

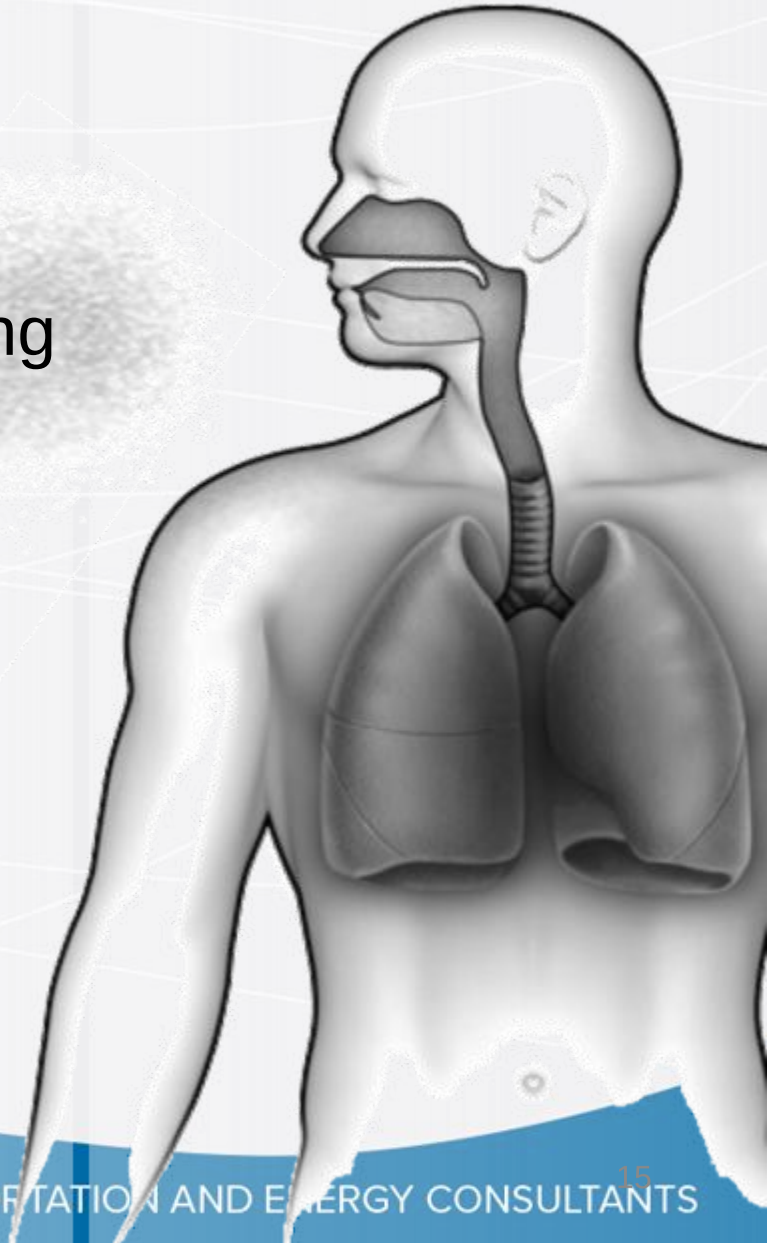
Building the East 91st Street MTS Won't Improve Citywide Air Quality

- Tug Boats are 6–11 times more polluting than DSNY collection trucks
- Replacing trucks with tugs will increase smog-forming nitrogen oxides
- Waterfront communities of Queens, Brooklyn and Staten Island will be downwind from tug pollution
- EIS did not address tug emissions



Children and Pollution Don't Mix

- Children are at greater risk for adverse health effects from diesel pollution
  - Their lungs are still developing
  - They breathe faster than adults, taking in more air
  - They spend more time exercising and playing outdoors
- 34,000 children use Asphalt Green annually, and more than 1,000 children live in the surrounding community



The Community is Very Concerned About Increased Tonnage at the MTS

- More than double the size of the original MTS
  - New footprint: 77,815 ft^2
  - Old footprint: 35,203 ft^2
- Community is very concerned about increased tonnage in future permits

Waste Capacity	Residential Waste (DSNY)	Comm. Waste (Private)
Permit Capacity	720 tpd	780 tpd
Facility Design Capacity	4,290 tpd for all waste	
Emergency Capacity	5,280 tpd for all waste	

The East 91st Street MTS Truck Ramp Will Create Unique Safety Concerns at Asphalt Green

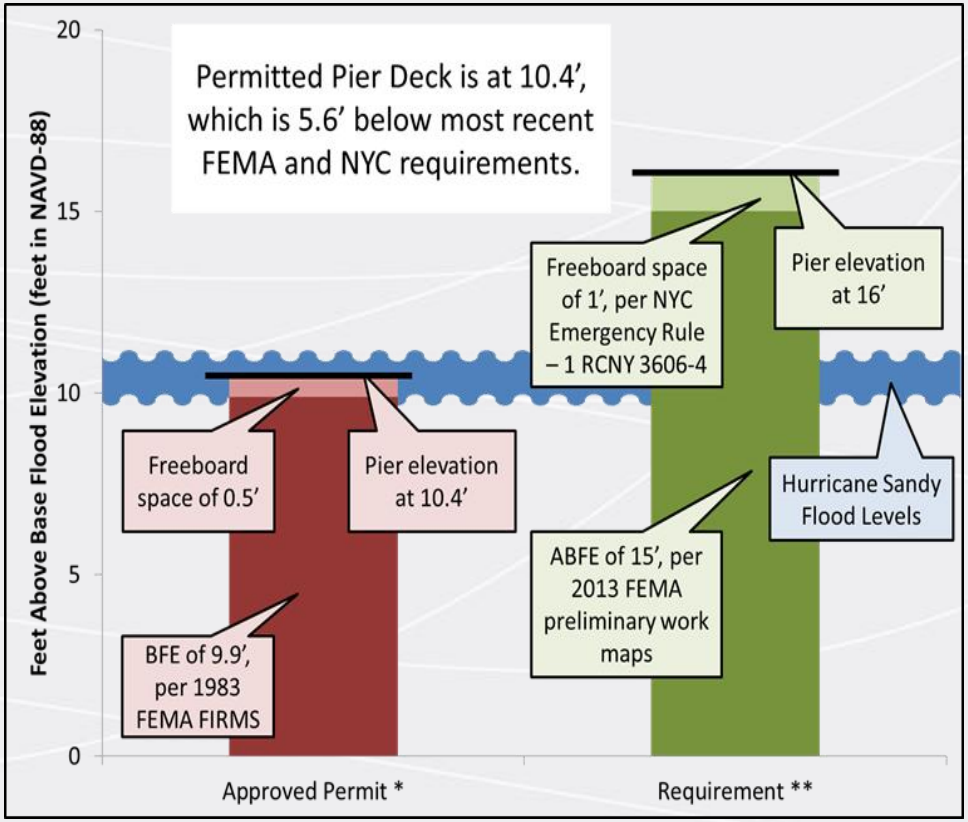
- 1 million people visit each year—all will have to cross MTS truck ramp entrance to enter Asphalt Green
- Asphalt Green also serves 34,000 children per year, creating a unique safety concern at the ramp
  - Includes 20,000 children from East Harlem, Bronx, and Brooklyn public schools who receive free or low-cost services
- Trucks also create traffic and safety issues in the nearby community

MTS Conflicts with Post-Sandy FEMA Guidance and Best Practices

- Building permit for the East 91st Street MTS was issued just five days before Sandy
  - Building permit was based on outdated FEMA maps that had not been updated since 1983
- Post-Sandy FEMA guidance will raise the minimum pier elevation from 9.9’ to 16’ at East 91st Street
- Raising the pier would reduce future storm risks and reflect best practices (e.g., Sims Recycling in Brooklyn)

Another Sandy-like Storm Could Cause Major Damage to the East 91st Street MTS

- Sandy floodwaters would have breached the MTS' pier deck if it had been built
- DSNY post-Sandy report: "a single breach in the [floodproofing] system…could render the entire system ineffective."
- NYC DDC: Breach would have cost $25 million and would have closed MTS for 6 months

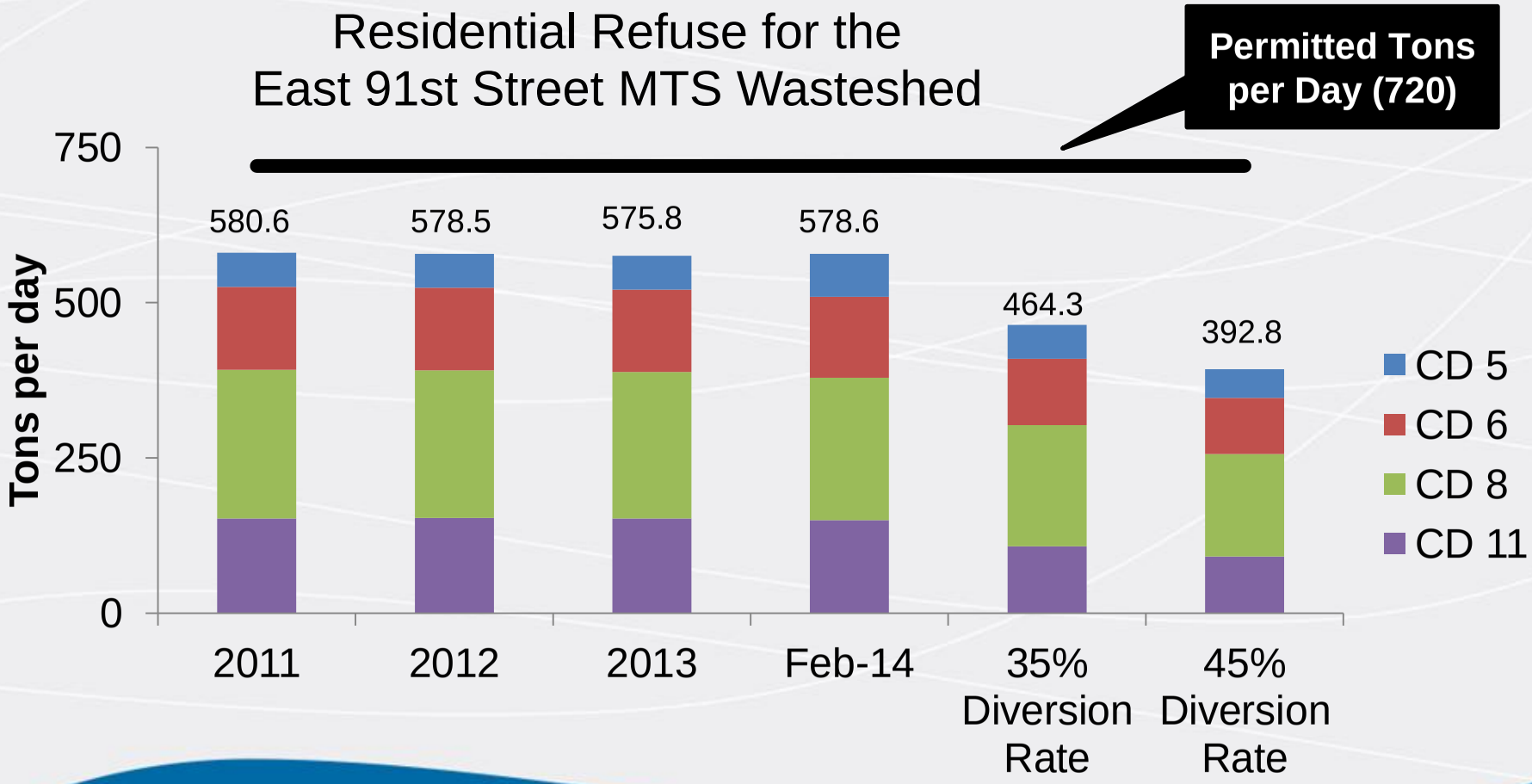


Future Projections Suggest East 91st Street MTS Is Not Needed

Manhattan CDs 5, 6, 8 and 11 Recycle 19% Currently

Community District	Organics (tpd)	MGP Recycling (tpd)	Paper Recycling (tpd)	Refuse (tpd)	February 2014 Diversion Rate
5	0.0	5.9	8.8	69.0	17.5%
6	0.0	14.6	19.8	130.5	20.8%
8	0.0	26.1	44.5	229.5	23.5%
11	0.0	5.5	10.8	149.6	9.8%
TOTAL	**0.0**	**52.1**	**83.9**	**578.6**	**19.0%**

If Recycling Rates Are Increased, Throughput at East 91st Street MTS will be lower



26.5% of Commercial Waste is Recycled, Historically

Borough	Organics / Food Waste (tpd) *	Non-organic Putrescible Waste (tpd)	Total Putrescible Waste (tpd)	Diversion Rate
Manhattan	747	3,401	4,148	28.4%
Brooklyn	342	1,560	1,902	29.1%
Bronx	227	1,032	1,259	19.1%
Queens	355	1,619	1,974	28.1%
Staten Island	91	416	507	14.0%
All New York City	**1,762**	**8,028**	**9,790**	**26.5%**

** PlaNYC estimates that 18% of NYC's commercial waste is organic / food waste*

If Recycling Rates Are Increased, Throughput at all MTSs will be lower

Commercial Waste Stream at 2003 Diversion Rates

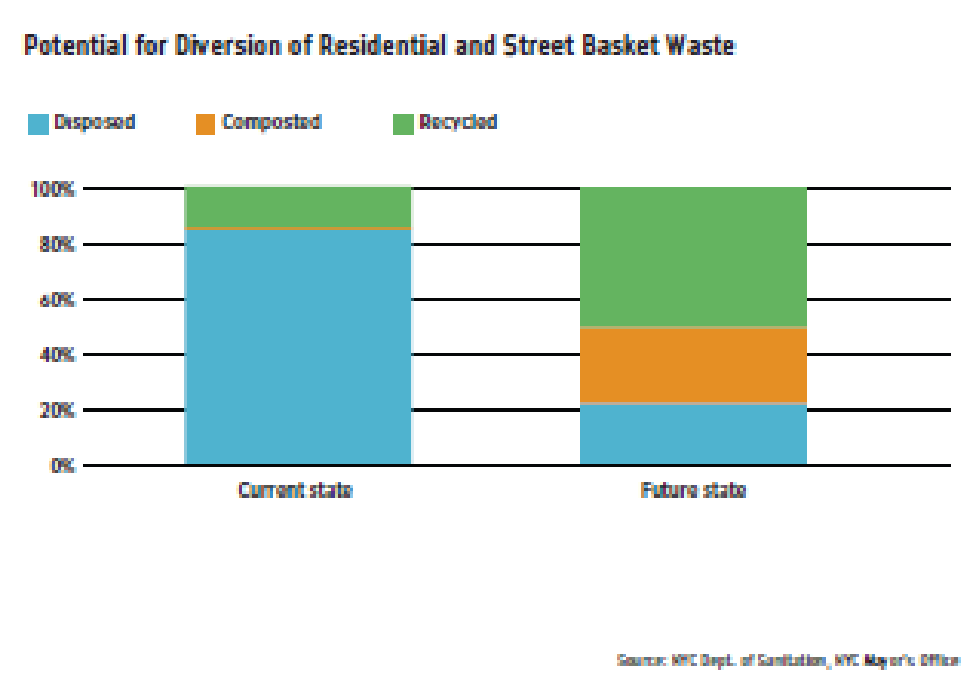
Borough	Recycling (tpd)	Refuse (tpd)
Manhattan	1,178	2,970
Brooklyn	553	1,349
Bronx	240	1,019
Queens	555	1,419
Staten Island	71	436
TOTAL	**2,597**	**7,193**

Commercial Waste Stream at 35% Diversion Rate

Borough	Recycling (tpd)	Refuse (tpd)
Manhattan	1,452	2,696
Brooklyn	666	1,236
Bronx	441	818
Queens	691	1,283
Staten Island	177	330
TOTAL	**3,427**	**6,364**

Achieving PlaNYC Goal of Diverting 75% of the City's Waste from Landfills Will Make MTS Strategy Obsolete

- PlaNYC includes a goal of diverting 75% of the City's waste from landfills by 2030
- When this is achieved, today's 578.6 tpd of waste in CDs 5, 6, 8, and 11 will become 178.65 tpd—18 trucks per day!



Source: PlaNYC 2011 Update, p. 139.

Despite Lower Forecasted Demand, the City Will Spend Billions to Build and Operate East 91st Street

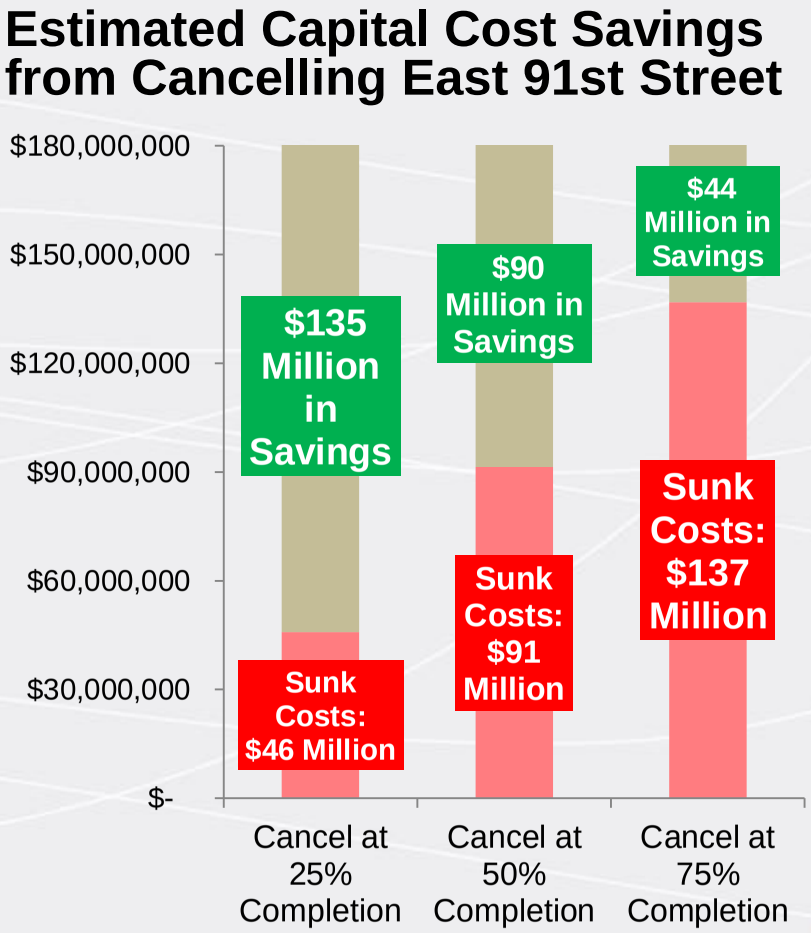
- Capital construction costs have increased from $47M to $182M
- Operating costs will increase by $26M in the first year and by $106M in the first four years
  - Much higher export and facility costs will more than offset transport cost savings
  - Recent bids suggest $70/ton range for continuing current approach, versus IBO's estimate of $238/ton at East 91st Street
- IBO: 20-year operating costs will be >$1B
  - More than $600 million more than maintaining status quo

Summarizing the Potential Waste Stream For East 91st Street

- The SWMP assumed there is a demand for 1500 tons/day at the East 91st Street MTS
- Current conditions suggest this demand does not exist now—and will not exist in the future
  - Residential waste in CDs 5, 6, 8, and 11 is less than 600 tons/day
  - Commercial waste can be tipped more efficiently and cheaply elsewhere
  - Increased recycling and organics diversion will further reduce demand
- By 2030, achieving PlaNYC goal will make MTS obsolete

The sooner the City acts, the more taxpayers will save

- Skanska-Trevcon awarded a $181.6 million contract in September 2012
- Terminating or modifying the project now avoids sunk capital costs later, plus decades of higher operating costs
- Terminating construction frees up funds for higher-priority uses



Source: GNA Analysis, 2014

GHG Reductions Shouldn't be a Barometer of the SWMP's Success

- The City estimates that the SWMP will reduce GHG emissions by 34,000 tons
  - Equivalent to just 0.06% of NYC's overall GHG emissions.
- Implementing the SWMP is not a meaningful climate strategy for the overall City
  - NYC's buildings are responsible for 74% of GHG emissions—a much better target for action
- Reducing local PM, NOx, traffic, and safety impacts should be highest priorities for SWMP implementation

Conclusions

Key points about the East 91st Street MTS

- The East 91st Street MTS:
  - Will attract a declining amount of Manhattan residential waste
  - Will divert a marginal amount of commercial waste and no C & D waste
  - Will not solve the truck traffic or pollution problems of Brooklyn, Queens or the Bronx
  - Puts 34,000 Asphalt Green children, 22,000 neighbors, and 5,700 NYCHA residents at risk
  - Is located in a mandatory flood evacuation zone
  - Takes hundreds of millions from other higher priorities
  - Will become increasingly obsolete as the City's recycling, composting, and other PlaNYC initiatives are implemented

More Effective Solutions to Reducing Disproportionate Impacts Exist

- Redirect money from the MTS budgets to remediate pollution from existing transfer stations in heavily-impacted neighborhoods
  - SWMP did not address existing stations at all
- Create incentives to accelerate the implementation of Local Law 145 of 2013
  - Would reduce trash-related particulate pollution by 70%
  - Total cost of retrofitting 4,000 private trucks: $77 million
- Revise and enforce truck routes to keep commercial trucks off small residential streets

Create A New Path Forward for Solid Waste in NYC

- The City should take steps to:
  - Reduce the tonnage of the City's waste,
  - Increase the amount of recycling and composting
  - Implement emerging, sustainable waste-to-energy projects (it's not just incineration anymore)
  - Integrate updated flood hazard guidance from FEMA and others to ensure facilities are as safe as possible