

**Testimony of Antonio A. Rosado, Senior Vice President
Castle Oil Corporation
Before the New York City Council
Environmental Protection Committee
January 24th 2008**

Good afternoon Mr. Chairman and members of the Committee. My name is Antonio A. Rosado. I am the Senior Vice President of Supply and Marketing of Castle Oil Corporation, the largest independent supplier of fuel oil in the New York metropolitan area.-Castle has been serving the residents, businesses, owners and managers of residential, commercial and industrial properties in the City of New York since 1928. Our company was founded by Mauro Romita, Sr., an immigrant, and it continues to be owned and operated by the second and third generations of the Romita family. Castle owns and operates two marine fuel terminals, including our terminal in the Port Morris section of the Bronx, with a combined storage capacity of 40 million gallons. My responsibilities at Castle include supervising the sourcing of fuel oil supply in the global markets, hedging that supply, transportation of fuel products to our terminals, wholesale sales to retail resellers, and product quality control.

On behalf of Castle, I thank Chairman Gennaro and the members of this Committee for the opportunity to testify today.

The proposed changes to the New York City Administrative Code in Intro 594 and Intro 599, are dramatic and sweeping. The petroleum industry has been moving toward lower sulfur and bio based fuels for some years now. The proposals before the City Council, however, are a cause for concern to our industry for several reasons. Although the

language of the proposals address bio fuels and sulfur reductions, they are two quite distinct issues and I will address them separately.

The proposed legislation would mandate reductions in sulfur content of heating fuels on an extremely aggressive timetable. We believe that the legislation if enacted may risk severe supply disruptions and price spikes at a time when the residents and businesses in our City can ill afford them. Our industry has supported the introduction of cleaner burning heating fuels for years. Suppliers, refiners, and distributors already have migrated to lower sulfur standards for most diesel products, a process that was phased in over a period of seven years at the national level.

The seasonal nature of fuel oil demand in New York, as well as the influence of external market forces, suggests a regionally coordinated approach to sulfur reduction such as the one proposed by the MANE-VU (Mid-Atlantic/Northeast Visibility Union) Statement.

The industry has reached out to regional agencies to ensure that New York and the other Northeast states move in a coordinated and consistent fashion. However, if improperly implemented without due consideration for national refining capacity, import patterns, and distribution chains, a rush towards cleaner heating fuels will result in significant supply disruptions and higher, more volatile heating costs at the worst possible times. The most dramatic effects would take place during the heating season, when local demand is greatest and much of the fuel oil that supplies the New York market is shipped from overseas.

Over the past several years, domestic refiners have invested heavily to meet federal mandates for cleaner burning gasoline and diesel fuel. These products currently command a premium price in the marketplace. Any additional ultra-low sulfur product produced by refiners will be sold at the highest prices possible. Therefore, unless refineries dedicate capacity to meeting increased demands of a local market, in order to meet supply requirements created by sulfur mandates in New York City, terminals would be required to purchase the premium priced ultra low sulfur diesel for blending into heating oil thereby creating an extremely expensive heating product. The increase in localized demand that would occur for three month long New York City heating season is highly unlikely to cause a shift in refiners' production strategies. Moreover, domestic refiners alone simply do not have the capacity to produce enough heating oil, regardless of sulfur content, to meet the peak winter needs of New York and surrounding States.

Currently, New York relies upon foreign imports for about one half of its mid-winter needs. While many of the foreign countries from which New York receives its supply are producing cleaner burning fuels, some exporting countries, such as Russia and Venezuela, have no plans to move in that direction. Forcing lower sulfur standards on New York City consumers would cut available imports during periods of peak demand. Moreover, the diesel transportation market already has built up significant regional, domestic, and international demand. As European countries continue to push for lower sulfur standards in transportation fuels, the global increase in demand for this product will magnify the supply shortfall by driving refiners' capital investments towards the supply of low sulfur diesel at the expense of low sulfur heating oil.

Distribution issues also illustrate the need for an integrated, regional approach. To prevent cross-contamination, different grades of heating oil must be segregated into a separate system from refinery to barge to terminal to truck in order to prevent contamination with other products. Constructing a localized supply system to handle a boutique grade of heating oil is useless if each link in the upstream supply chain is not also segregated.

New York's oil heat industry supports the move to lower sulfur heating fuels. However, the proposed legislation today goes further than mandating lower sulfur #2 oil, it seems to also mandate eventual low sulfur concentration limits in #4 and #6 oil to unattainable levels, when New York City already imposes the most stringent sulfur limits for #6 oil in the region. This would essentially prohibit the use of these widely used fuels in any buildings within the city limits. The effect of this will be to force private property owners to incur extraordinary, unplanned capital expenditures to replace otherwise serviceable equipment. These expenses will be recaptured somewhere, likely in higher rents or maintenance fees and surcharges or assessments.

It would be imprudent for New York business and building owners to be forced to move rapidly to a boutique product that will not be widely available for some time. A regional, realistic, multi-year schedule that is designed so as to not unduly burden the consumer is what is warranted.

Bioheat™, a blend of a pure bio based fuel product (B100) with traditional distillate (#1 and #2 heating oil) petroleum in a 5% concentration or B5, has been in use for the past few years. There has been extensive laboratory and real life testing of B5 and such testing has shown that, in this concentration, B5 does not negatively impact the performance of heating equipment in small applications. It is important to note that there are insufficient published studies reporting on the performance of bioheat blends in large residential and commercial heating equipment. The American Society for Testing and Materials (ASTM) has been working toward a standard specification for B5 for many years and has not yet been able to agree on any such standard. We remain wary of the use of any product that has no uniform specifications and any product in any concentrations that have not been satisfactorily tested in both in laboratory and real life conditions. A particular concern that we have is that concentrations of biofuel of greater than 5% will have a reduced Btu content per gallon when compared with petroleum heating fuels and this will result in an increased consumption of fuel in order to obtain the same amount of heat in any given application. Moreover, most fuel terminals are not currently equipped to handle biofuel blending into #4 and #6 fuel oils which require specialized equipment to ensure homogeneity and consistency of quality.

Mandating such blends without adequate testing may have the unintended result of extensive equipment failures leaving thousands of New York City residents and businesses literally out in the cold.

My educational background includes a degree in Chemistry. At the current time, there is no ASTM approved test that is capable of testing for the existence of biofuel in a heating

product, no less specific concentrations of that fuel. Therefore, mechanisms for determining compliance would have to be established.

We remain very concerned about blends of B100 into any heating fuels in concentrations greater than 5%. At present no heating equipment manufacturers have warranted their equipment for blends of B6 to B20. Such mandates will likely have the effect of invalidating the manufacturer's warranties on recently installed heating plants. This would cause many property owners who have just incurred a major capital expense (new commercial heating installations can cost well into 6 figures) to forfeit the benefits of those valuable warranties.

In summary if done in measured fashion, B5 is a laudable and achievable goal. The effects of mandating anything greater than a B5 blend are risky and highly unpredictable.

Thank you for your time and attention.

New York State Petroleum Council

Michael R. Doyle
Executive Director

A Division of the American Petroleum Institute

Cathy A. Kenny
Associate Director NYC

**STATEMENT OF CATHY A. KENNY
Associate Director**

NEW YORK STATE PETROLEUM COUNCIL

Before the

NEW YORK CITY COUNCIL COMMITTEE ON THE ENVIRONMENT

**Int. No. 594 In Relation to the Use of Clean Heating Oil in New York City and
Int. No. 599 the "Bioheat Act of 2007"**

January 24, 2008

Council Chambers, City Hall

New York, NY 10007

Good afternoon, Mr. Chairman and Members of the Committee on Environmental Protection. I am Cathy A. Kenny, Associate Director in the New York City Office of the New York State Petroleum Council. The Council is a trade association that represents a number of major-branded petroleum companies that market in this state. We are a division of the American Petroleum Institute (API) which represents over 400 companies engaged in all aspects of the oil and gas industry including exploration, production, refining and marketing. Locally, our members include BP America, Hess Corporation, ConocoPhillips, ExxonMobil Corporation and Shell Oil Company.

Thank you for this opportunity to submit comments on Int. No. 599, the “Bioheat Act of 2007,” and Int. No. 594 relative to the use “of clean heating oil in New York City.”

Before I address our specific concerns with both of these bills, I would like to dispel a common misconception that the oil and gas industry is opposed to alternative fuels or in this particular instance, biofuels. Our industry is not in fact opposed to the development and use of these fuels. We recognize that to meet the expected increase in demand (19% more in oil and 7% more in natural gas in the U.S. alone by 2030) all options should remain on the table—our nation needs *all* sources of commercially viable energy, as well as a greater commitment to energy efficiency and energy conservation. To help meet projected demand growth in the next two decades, according to the most recently available report issued by the University of Texas, U.S. oil and gas companies invested \$98 billion between 2000 and 2005 on emerging technologies in the North American market (Canada and the U.S.). This expenditure is 73% of the estimated total of \$135

billion spent by all other U.S. companies and the federal government combined. The consequence of recent high energy prices has led the industry into a slate of new investments in alternative energy, frontier hydrocarbons and advanced end-use technologies that will provide greater diversity of supply and environmentally friendly energy use in the future. This industry then, more than any other, has poured money into developing alternative energy solutions to meet increasing energy demands.

What the industry does oppose, however, are government mandates. In imposing mandates, particularly in the energy sector, the government is essentially picking the “winners” and “losers” in fuel options. Such decisions are often made in a vacuum without consideration of market and technological realities. Mandates traditionally mean a loss of flexibility that would ordinarily permit the market to seek the most favorable solutions in terms of the environment, in terms of available and proven technology, in terms of adequate and secure supply and in terms of competitive prices.

INTRO. NO. 599

That said, as you are probably aware, there is no state, or city for that matter, that currently has a biodiesel heating oil mandate although a number of legislatures have considered such bills. If New York City then were to enact such a mandate, it would essentially be isolating itself from the fuel supply of surrounding regions. Creating a biodiesel mandate could leave the City with supply disruptions in either component of the biodiesel fuel; with storage capacity problems; and transportation difficulties since biodiesel cannot be transported through the existing pipeline systems. Even the CEO of

the National Biodiesel Board has stated that, “We do need to look at a comprehensive energy strategy and not have a patchwork quilt of mandated biodiesel blends from state to state.”

Furthermore, the Council should also be aware, if it is not already, that not all biodiesel fuels are “equal” in terms of environmental benefits. The European Union has recently promised new guidelines to ensure that increased biofuel production doesn’t do more harm than good. “...Reports have warned that some biofuels barely cut emissions at all—and others can lead to rainforest destruction, drive up food prices, or prompt rich firms to drive poor people off their land to convert it to fuel crops.” Int. No. 599 makes no distinction along these lines of which feedstocks should be certified as the European Union recommends, nor does it include in its definition “renewable diesel” which is a nonester diesel fuel or fuel blending component derived from non-petroleum renewable resources which also meets the ASTM specifications for diesel fuels (D975) or fuel oils (D396). Non- petroleum renewable resources include vegetable oils, animal fats and animal wastes.

In addition to these concerns, the Council should be mindful that since this bill and Int. No. 594 were first introduced in June of 2007, the Energy Independence and Security Act of 2007 has since increased the renewable fuel standard from 9 billion gallons in 2008 up to 36 billion gallons in 2022—a fivefold increase. This mandate includes a .5 billion biodiesel mandate in 2009 which increases to 1 billion in 2012 and later years. The industry has already expressed serious concerns about its ability to meet these increases.

Mandating biodiesel heating oil during the same time this aggressive federal requirement kicks in, is to court trouble. The City's biodiesel mandate then would be competing for the same biofuel components dictated under the federal law for the transportation sector.

Because of the above concerns and because this bill would create a loss of flexibility in the fuel distribution system which raises the possibility of localized product shortages with consequential price spikes on home heating prices, we oppose this measure.

INTRO. NO 594

In addition, as the attached chart shows, other federal requirements for low sulfur diesel that began in 2006 for highway fuel will increase for non-road vehicles and locomotive and marine vehicles for a complete reduction in sulfur to 15 ppm by 2014. Taking into consideration these separate federal requirements, a New York City-specific biodiesel and low sulfur requirement that occurs within the same timeframe of implementation of these federal requirements, raises concerns. Like biodiesel, the City's low sulfur heating oil requirement will be competing with the transportation sector users of highway and non-road diesel of 500 ppm distillate fuel. Besides putting a strain on the pool of available highway/non-road product, low sulfur heating oil would also be in competition with these higher value/price products. The market participants/importers have a natural inclination to turn to the market where price and demand are the highest. This means, that regardless of New York City's needs, suppliers and importers may just not use their resources to meet the City's demand for low sulfur/biodiesel fuel. Heating oil desulphurization requires massive capital investments in hydrotreating facilities and is

much more costly to make than ultra low sulfur diesel motor fuel. And there is no guarantee that current producers of ultra low sulfur diesel will make the investment, particularly for a city-specific demand. To give you an idea of the cost of such projects, one of our member companies has provided an estimate between \$150-\$200 million for just one desulphurization project it has underway. Traditionally, these projects also require a lead time of 4-5 years for permitting and construction. At present, none of our member companies are making low sulfur heating oil and most do not have the existing tankage and lines to distribute the fuel. Finally it is worth noting that most of the East Coast's heating oil is supplied through imports for a limited time of three months. On the East Coast, 35% of heating fuel comes from other regions of the U.S., 27 % comes from foreign imports, 28 % comes from local refinery production and 10% from stocks. In 1999-2000 when cold weather created supply problems, imports were the primary source of relief. While countries like Venezuela and Russia have provided important sources of additional supply during these times, these two countries cannot supply even 500 ppm let alone 15 ppm distillate to the U.S. because they have very little capability to produce low sulfur distillate. So, not only do domestic sources not produce a low sulfur heating fuel, importers cannot meet this demand either. According to the Energy Information Administration (EIA), "This supply picture implies that a restriction of 500 ppm sulfur will limit import availability. During stable periods, such a limitation might only raise the price slightly, but if markets tighten as a result of extended cold weather or supply disruptions, this historical relief valve [i.e., imports] might not be able to respond. States may consider waivers for such times, but the potential of exercising a waiver can

exacerbate a supply problem by discouraging the industry from bringing in expensive low sulfur material due to the risk of being undercut by a waiver.”

Above all, in considering this legislation we think the Council should consider the overall benefit to the environment and at what cost. Currently, through the Mid-Atlantic/Northeast Visibility Union— commonly referred to as MANE-VU— the industry is discussing a gradual and coordinated phase-in of low sulfur heating oil. Under MANE-VU, for New Jersey, New York, Delaware and Pennsylvania, sulfur content in No. 2 heating oil would be reduced to 500 ppm by 2012 and then down to 15 ppm by 2016. Sulfur reductions have also been targeted for the heavier grade fuel oils. Since this approach is regional, phases-in the reduction on a schedule that the industry could possibly meet, we see little to be gained by the Council’s targets in Int. No. 594. In our view, the City would be taking a gamble that low sulfur distillate would be available for heating use, jeopardizing what is most important about heating oil—supply reliability.

In these times of economic uncertainty, the industry believes it is premature to support an ultra low sulfur heating fuel. More preferable is a gradual change as was made with ultra low sulfur highway diesel fuel which change-over occurred seamlessly, at least from the consumer’s perspective. Advance time is needed to ensure fuel supply reliability. It is important that the industry be given time to address distribution-related issues, such as minimizing product downgrade and managing pipeline and terminal fuel interfaces, etc. In considering such a dramatic change in heating fuel requirements, we hope that the Council will consider these comments in the light in which they are intended which is to

highlight the paramount importance of ensuring the adequacy of the City's supply of heating fuel that is secure during both normal and abnormal winter seasons and comes to the consumer at a competitive price.

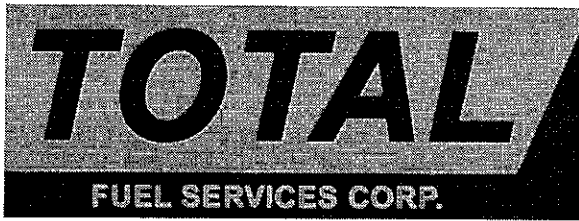
Thank you for this opportunity to present our industry's views.

Federal Diesel Regulatory Timelines

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Highway	15 ppm	15 ppm (80%)*	15 ppm (100%)	15 ppm (100%)	15 ppm (100%)	15 ppm (100%)	15 ppm (100%)	15 ppm (100%)	15 ppm (100%)
Non-Road (NR) (Farm/construction)	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm
Locomotive & Marine (LM)	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm
NR & LM Small refiner or w/credits (& exceptions)	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	500 ppm	15 ppm

* 2006: Refinery – June 1; Terminal – September 1; Retail – October 15





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In Reference to Int. No. 594 & Int. No. 599

Daniel Falcone
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Chicago, IL 60604
Chicago Board of Trade

I am a wholesale and retail distributor of Diesel, Heating Oil, Bio-Diesel and Bio-Diesel Blended Fuels. I have been retailing a Bio-Heat Product (B20 & B5) for the last 2 years and a Bio-Diesel Product (B20) for the last 6 months. I am a member of the National Bio-Diesel Association, and Associate member of the Clean Cities Program in New York, Connecticut and New Jersey, a member of the Connecticut Bio-Diesel and Bio-Fuel Association, a member of the Environmental Business Association and the Vice Chair of Policy with the Bio-Fuels Industry Committee in Albany New York, working to create and support legislation that promotes the production, distribution and use of Bio-Fuels in New York. My company has aligned itself with Ultra Green Energy Services affiliated with one of the largest agricultural and bio-fuel distributors in the country.

We bring a well balanced risk managed program for buying ratable supply of Bio-Fuels into the Northeast. We offer spot or volume hedging opportunities vs. several market indexes with Capped or Fixed pricing, very flexible payment terms and quality assurance protocols. We are very familiar with the existing network of distributors and are working to help them mature into this alternative fuel market to satisfy not only the public sectors needs but the private as well. We are in full support of Bills 594 & 599.



We also support the Director's ability to insert a waiver on percentage of ratable #2, #4 & #6 oils. There would have to be federal mandate to have refiners produce ultra low sulfur heating oil for there to be sufficient supply to the entire industry for it to be economically feasible to satisfy the stated requirement in Bill # 594.

I am willing to make myself available for information to help the City Council or the Mayor's office to complete this task or any additional assistance involving the Bio-Fuels Industry.

Sincerely,

Daniel Falcone

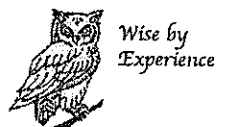
Total Fuel Services Corp.

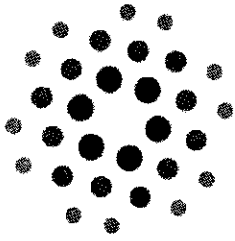
Ultra Green Energy Services

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TSB

TRI-STATE BIODIESEL

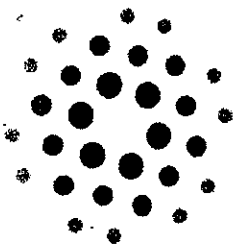
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- Tri-State Biodiesel (TSB) currently retails biodiesel blends to several fleets and heating oil customers in NYC.
- The biodiesel fuel sold by TSB is made from waste cooking oil collected at local restaurants.
- Tri-State Biodiesel is building its own biodiesel manufacturing facility in Red Hook, Brooklyn.
- The Red Hook Facility will have 3 million gallons per year production capacity on line by Q4 2008.
- The Red Hook Facility will have the capability to expand production as the market demands and could potentially double capacity by the end of 2009.
- TSB is part of a national network of biodiesel producers, marketers, terminals and distributors that have built a distribution “pipeline” for biodiesel delivery to NYC.
- Through this network, TSB has the capacity to deliver several million additional gallons of biodiesel to NYC markets by rail and barge.
- The United States biodiesel industry has 2.2 billion gallons of production capacity and an additional 1 billion under construction in 2008.
- Tri-State Biodiesel strongly encourages the passage of the bioheat mandate.
- If the mandate creates a 25 million B100 gallon market as projected, the carbon reduction for the city would be reduced by about 258,000 tons.
- This mandate will assist the development of the biodiesel industry both here in NYC and in the surrounding region bringing health benefits, environmental benefits and jobs to the City.

For more information visit www.tristatebiodiesel.com. As always I am available to speak answer any questions the council members might have.

Best,

Brent Baker
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TSB

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THANKS FOR YOUR INTEREST IN BIODIESEL AND OUR COMPANY

TRI-STATE BIODIESEL collects used cooking oil from hundreds of restaurants around New York City. The collected cooking oil then transformed via chemical process technology into a high quality diesel fuel known as Biodiesel. Currently the processing is done out of state, but soon all the processing will be done right here in NYC at Tri-State Biodiesel's Brooklyn Facility. The Biodiesel fuel is then delivered directly to our local trucking fleet customers by our certified fuel delivery trucks. **Call today for competitively priced Biodiesel delivery to your fleet.**

OUR WASTE OIL COLLECTION SERVICE IS FREE, and gives restaurants an incentive to recycle used oil instead of throwing it away with their garbage or illegally dumping it into the sewer system, as well as the satisfaction of supporting an important environmental movement. **Call today for free waste cooking oil collection.**

OUR BIODIESEL can be used in any modern diesel engine with no modification. Biodiesel is a domestically-produced fuel, which helps reduce our dependence on foreign oil. It is biodegradable and carbon-neutral, greatly reducing the greenhouse gasses and pollutants, which threaten our environment. In addition, biodiesel is far better for your health, reducing cancer-causing air toxins by 90%. Biodiesel is the only alternative diesel fuel that's been approved by the EPA, and is already being used by over 1000 fleets nationwide.

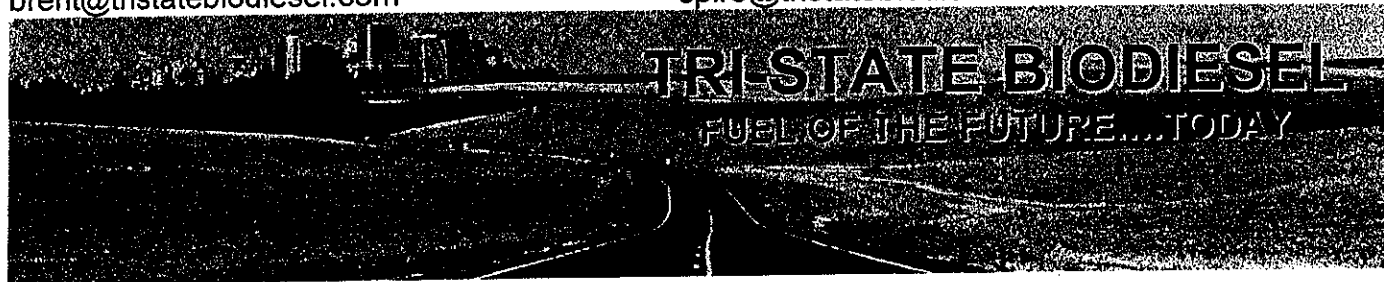
AT TRI-STATE BIODIESEL we put great effort into maintaining our business relationships. Whether you are a restaurant owner, a fuel distributor, or a biodiesel end-user, you can count on Tri-State to be reliable, consistent and professional.

YOU CAN HELP by fueling your diesel cars or trucks with Biodiesel. Burn Biodiesel instead of heating oil this winter. Ask your local service station to make biodiesel available at the pump. Ask your local restaurant to use our waste collection service. And always check our website at www.TriStateBiodiesel.com. **Together we can make New York a cleaner, healthier city.**

FOR MORE INFORMATION CONTACT:

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**Council of the City of New York
Committee on Environmental Protection**

Comments on Intros. 594 and 599 Regarding Use of Biodiesel as Heating Fuel in New York City

24 January 2008

Good afternoon and thank you for inviting me to appear before the Committee this afternoon. My name is John Nettleton and I am Senior Extension Associate with Cornell University Cooperative Extension/New York City. I develop and manage applied research and education programs in energy security and renewable fuels. Our work is directly linked to Cornell's campus-based research for the benefit of New Yorkers.

Nearly three decades of Cornell's educational work on New York housing stock is now refocused on overall sustainability, energy efficiency and the potential for biofuels such as biodiesel (BD), to improve overall air quality, the City's carbon footprint and operations and maintenance in the built environment. Both Intros under consideration (594 and 599) have the potential to make a positive impact on City life: my comments are framed to help improve the design of the legislation and clarify the details I find most critical. If brought forward with care, the expanded adoption of BD blends in heating fuel can be a good thing.

Public Health Benefits: The major benefit of BD blended in heating fuel will be in the public health arena by measurably reducing pollutants,

especially particulates, carbon dioxide and sulphur dioxide. As stated in my previous Committee testimony last April, an emphasis to change over NYCHA developments and public school buildings in those Health Districts with elevated asthma levels (roughly ten Districts, including Morrisania, South Bronx, East Harlem and North Brooklyn (Bushwick, Bed-Stuy, Brownsville, etc.) will immediately benefit those community residents. The suggested 'three step' strategy of B5 to B10 to B20 in both Intros. could easily be collapsed into two, going from B10 to B20 and beginning with municipally owned buildings. You receive more 'bang for the buck' in reduced pollution and simplify the variety of delivered fuels. With residual heating oils (#6 and #4) the proportional 'pollution benefit' of BD blends is greater than for #2 heating oil. Use of BD in residential boilers and heating plants will reduce pollutants (e.g., the more than 23KT of sulphur dioxide generated Citywide in '04).

Carbon Footprint and Building Audits: Continued insistence by the Federal government that biofuel crops are a 'key reducing our demand for foreign oil', etc. has been shown to be both misplaced and wrong. It's increasingly apparent that biofuels in general- including BD- will not significantly impact the City's carbon footprint. Globally traded biofuels have too many 'fuel miles' on them and recent studies by the Royal Society and others reveal that nitrous oxide from the nitrogen (N) used in biofuel crop production tips the balance *against* certain fuels (esp. rapeseed and corn-based ethanol). The key to reducing NYC's carbon footprint lies in linking building performance analysis (top to bottom energy audits) for buildings prior to their adoption of biodiesel- whether B10 or B20- for space heating. Of the 900,000 buildings in NYC, only 100 or so are in any way 'green': attention to the heating plants and building systems of the existing building stock is critical if the City's carbon footprint is to be

reduced: cost-effective measures and technologies that cut overall building-based energy demand can then be combined with BD blended heating fuels .

Biodiesel Standards: The sustainability standards recommended in Intro 594 are critically important to the long-term development of an industry that is sustainable in scale and environmentally responsible. The European Union (EU) and Canada are presently focusing on these issues in a big way (See 'Criteria for Sustainable Biomass Production': Cramer Commission Report, The Netherlands, July 2006 and 'Europe Cutting Bio-fuel Subsidies', NY Times, January 22, 2008) to develop "sustainable certification" for biofuels on the basis of reduced emissions (compared with petroleum products), methods of cultivation and transportation. As the largest city in the region most dependent on heating oil and a national pioneer in this arena, New York's standards on biodiesel should be congruent with the emerging European (and Canadian) standards as a unified standard applicable to growers and biofuel developers on a global basis. Given that nearly 90% of all oil heat for buildings occurs east of Pittsburgh and north of D.C., this clearly becomes an issue for CONEG (the Council of Northeastern Governors) so that a consistent standard is available for producers (growers) and developers. To improve the 'standard' from currently rail-delivered BD from the Mid-west, the potential of securing either local or regional feedstocks should be fully explored with an eye towards reducing transport costs and building sustainable business opportunities Statewide. Such a 'market call' by New York City for feed-stock for BD blended heating fuel will draw on the growing interest by small agricultural producers in New York seeking markets for alternative cool weather crops (flaxseed, rapeseed and mustard seed) better suited to Hudson River growing conditions than the typical soy-based BD: New York

ranks 25th nationally in soybean production, but novel blends and the use of waste vegetable oil (WVO) demonstrated by Tri-State Biodiesel offer models for production of alternative feedstocks. Cornell's study of WVO (Summer, 2005) showed that 1.65- 1.82 million gals./WVO are generated by retail food operations in Brooklyn alone, a figure that doesn't include processors or a Citywide total, which could be in the 8-10 million gals./year (mgy) range. Though small given overall demand, it represents a starting point and the potential for regional or Statewide production is real and promising: a total of 1.5 million acres lie fallow in New York State and are not being used for food production: added lands (NY State Thruway right-of-way, SUNY campuses, other State institutions and planted highway rights-of-way have not been fully assessed.

Waivers and Hardship: The proposed legislation provides waivers in case(s) of lack of available fuel and/or technical feasibility. The technical questions have been largely if not entirely answered and the industry's capacity to provide fuel has likely been answered by others testifying today once the ULSD content question is clarified. The hardship question neither cited nor addressed involves price volatility and the related impact of economic hardship within a nascent industry where feedstock prices have been whipsawed by the dynamics of global and national biofuel markets. The major focus on corn-based ethanol in the U.S., in essence a hugely subsidized method of brewing weak beer has been covered extensively by writers and commentators such as George Monbiot and Robert Bryce. With Midwest producers shifting to corn on a massive scale, soybean futures have also risen and impacted BD prices. Many residential buildings who adopted B20 during the '06-'07 heating season switched back to regular heating oil and have moved to the sidelines to wait out the game. A \$.15/gallon price differential for mandated B20 heating would lead to a levy

on a 22 unit Bronx apartment building of over \$2,000/season, imposing a real burden on housing occupied by low and moderate income tenants and cooperators Citywide. The issue of price volatility requires closer examination of both New York City's residential heating fuel tax as well as the gross receipts tax for nonresidential heating fuel, which is of concern for 'small big' users such as universities and hospitals who should also be shifting to a cleaner heating fuel.

Education and Outreach: A publicly focused program of public education highlighting the 'success stories' of using BD as a heating fuel is essential. The potential contribution of any if not all of these initiatives will measurably improve the environment and energy resilience of New York City. The promotion and public demonstration of BD use throughout the housing sector can help 'jump start' the industry, improve air quality, reduce pollution and generate employment for producers of BD feedstocks by Empire State producers as well as those engaged in retrofitting the City's housing stock to ensure greater energy efficiency. I will be pleased to answer any questions or provide resources that the committee may require.

Respectfully submitted,

John Nettleton



AMERICAN LUNG ASSOCIATION®

of the City of New York, Inc.

**Testimony of
Michael Seilback, Senior Director of Public Policy & Advocacy,
American Lung Association of the City of New York
Regarding
Clean Heating Fuel and Bioheat
January 24, 2008**

For more than 100 years, the American Lung Association of the City of New York has worked to prevent lung disease and promote lung health among the residents of the five boroughs. In that regard I am here to testify on the use of Bioheat and other clean heating fuels in New York City.

New Yorkers are exposed to some of the most unhealthy air pollution levels in the country. Year after year the American Lung Association State of the Air report shows that the outdoor air quality in the five boroughs is toxic.

The State of the Air report is a county-by-county report card on the two most pervasive air pollutants: particle pollution (soot) and ozone (smog). Long term exposure to both of these pollutants can permanently damage lung tissue and has been shown to shorten lives. This year, the report ranked the New York metropolitan area on the top-ten list for cities with the worst ozone pollution and it ranked 16th worst for areas most polluted by short-term particle pollution and 17th for year-round particle pollution.

In New York City alone, one million residents have been diagnosed with asthma, including 300,000 children. The toll of poor air is an enormous burden on the health of a City already struggling to breathe. Children are particularly susceptible to the effects of particle pollution since they breathe fifty five percent more air per pound of body weight than adults, have greater prevalence of chronic asthma and are more likely to be active outdoors.

In order to significantly improve New York City's air quality, our Association has long advocated for cleaning up home heating oil. The combustion of sulfur-laden home heating oil contributes significantly to the high ambient concentrations of ozone and fine particles found in New York State – particularly in New York City and all of the surrounding counties. To that end, we are strong advocates for the use of biodiesel in the home heating sector to address this significant source of pollution.

Home heating oil is essentially the same as diesel fuel, except there are virtually no limits to the level of sulfur that can be in it. Since it has such a high level of sulfur, combustion of home heating oil makes it the second largest source of sulfur dioxide emissions in the State, second only to the power sector.

In New York City alone, nearly one million households heat their homes each winter with heating oil. Over 79% of the State's consumption of heating oil occurs in the New York Metropolitan area, contributing to New York City's poor air quality. Yet most New Yorkers are

not aware that this is a significant source of pollution in their homes and that alternative, cleaner fuels exist for home heating purposes. Bioheat is one such alternative that New York City should work to promote as a cleaner, cost efficient option.

Though biodiesel used in the transportation sector has been shown to increase nitrogen oxide emissions, Bioheat has been shown to reduce emissions of all pollutants. Promoting the use of Bioheat, consisting of 20% biodiesel in combination with low or ultra low-sulfur fuel, will significantly eliminate the sulfur dioxide emissions from heating oil use and simultaneously reduce NOx emissions.

Not only will cleaner fuels result in decreased emissions of harmful pollutants, but use of cleaner fuels can also produce economic advantages for the consumer. For example, boilers need to be serviced less frequently and they have been shown to foul at least 50% less frequently. In fact, if cleaner home heating oil were used statewide, homeowners would save \$200 million annually in cleaning costs.

At the State level, the Lung Association has been instrumental in advocating for a tax-credit for the use of Bioheat. In fact, on Tuesday, Governor Spitzer included this tax credit in his executive budget (the original credit expired on July 1, 2007). This credit would be particularly beneficial to New York City apartment owners and large co-ops and would encourage them to use cleaner fuel. These buildings currently either use No. 2 fuel, capped at 2000 parts per million of sulfur, or heavier No. 6 fuel, capped at 3,000 ppm. Because No. 6 is cheaper, several co-ops are choosing this dirtier alternative. This tax credit encourages home-owners to use much cleaner heating oil.

Additionally, we support efforts by the New York City Council to take action in capping the allowable sulfur content of home heating oil to 15 parts per million, the current on-highway standard. We support a timeline approach such as in Councilman Gennaro's Intro 594 which would rely on an increasing amount of Bioheat, while decreasing the levels of sulfur allowed in heating oil citywide. While we certainly also support Councilman Yassky's approach in Intro 599 to increase the use of Bioheat in New York City, we believe that it is important to both increase Bioheat and decrease the amount of sulfur in heating fuel.

The time is now to clean up the air that we breathe. We implore you to resist the temptation to scale back these proposals, the public health of New York City residents is too important to enact laws that are not as stringent as possible: to do so we must reduce the sulfur content in heating fuel to 15 ppm and to drastically increase the amount of Bioheat used within the five boroughs.

Thank you for the opportunity to comment. We are happy to entertain any questions you may have.



**Testimony of John Maniscalco, Executive Vice President
New York Oil Heating Association
Before the New York City Council
Environmental Protection Committee
January 24th 2008**

Good afternoon Mr. Chairman and members of the Committee. My name is John Maniscalco. I am the Executive Vice President of the New York Oil Heating Association, a 65-year-old industry association that represents mostly family-owned heating oil terminals and distributors as well as New York City licensed oil burning equipment installers and other professionals associated with the oil heating industry.

I would like to thank Chairman Gennaro and the members of this Committee for the opportunity to testify today. Intros 594 and 599, propose changes to the oil heating industry that are unprecedented in our history. The central goal of improving heating oil products by lowering emissions and reducing dependence on foreign petroleum is something that we all share. The only question is— how? How do we best go about introducing Bioheat into home heating oil and lowering the sulfur content in heating oil? Before I begin, a note of clarification: “heating oil” is defined in the industry as #2 fuel oil. The term heating oil does not include #6 oil or #4 oil, the latter of which is a blend of #2 and #6 oils in specific proportions.

To start, it is important to understand that the issues of Bioheat and sulfur reductions in heating fuels are two very separate and distinct issues, tied to different supply dynamics and they must be treated separately.

Let's start with Bioheat. The New York Oil Heating Association supports the uniform introduction of Bioheat into New York City. Bioheat, which has many outstanding environmental benefits and which helps to reduce our dependence on foreign petroleum, has been around for several years now. We are very encouraged that Becket, the largest burner manufacturer in the United States, now warrants B5, which is 5% biodiesel, in all of its #1 and #2 heating oil equipment, which is the kind of home heating oil used in all single family homes and many residential and commercial buildings. I have personally spoken with the folks at Becket and at 6 other equipment manufacturers and every single one of them says they will stand by B5. We are also greatly encouraged by the ASTM's recent announcement that its sub-committee on biodiesel has put forth specs for all

biodiesel blends up to B20, which is 20% biodiesel, and is expected to issue a full decision on these specs in June 2008. It is our belief that such momentum may prompt other manufacturers to warranty their equipment for higher biodiesel blends, just as it has for biodiesel in the transportation sector, where B20 is now common.

And we are encouraged that Governor Spitzer included the penny-per-gallon Residential Bioheat Tax Credit in his Executive Budget this week which will benefit homeowners and residential apartment building owners for 4 tax years starting January 1 2008 and will likely enable Bioheat purchasers to break even and in many cases, save money on their heating bills, which is welcome news this tough heating season. With the restoration of this credit, coupled with B5 marketplace experience and manufacturer and consumer confidence, NYOHA would support legislation that requires a new uniform heating oil standard of B5 for #2 heating oil, provided that such a mandate is contingent on three very important factors: supply, quality control and adequate ramp-up time. Intro 594 already links the mandates to supply but a determination of adequate supply should be made prior to every heating season for at least the first few years – perhaps by an advisory committee similar to the one proposed in Intro 594. Currently, a building owner or homeowner would have to make the case and seek a waiver of the mandate in the event that they were unable to obtain the required product due to lack of adequate supply.

Intro 594 must require that all Bioheat have a BQ9000 certification from the National Biodiesel Board to ensure quality control. And the mandate must take effect at least 24 months after the passage of the bill to ensure that no timetables are set and become unrealizable if there are delays in passing the legislation. Terminals will only begin to ready their operations to handle this new product when they are certain it will actually happen and 24 months would be a reasonable time frame in which to ramp up for the new products. That is not to say that the city should not engage in efforts like the “clean heating oil promotion strategy” that is proposed in the bill so more buildings burn Bioheat sooner rather than later, or provide incentives for terminals to start selling Bioheat – like funding programs that encourage terminals to add more storage capacity.

It is also our recommendation that city-owned buildings and all city buildings mandate B5 at the SAME time. It will be logistically difficult for companies in competition for city bids to store B5 AND #2 heating oil due to a lack of tank storage capacity at many terminals.

If legislation is passed this Spring, all #2 home heating oil will be B5 by Spring of 2010 – which would far and away be the most aggressive and significant municipal Bioheat mandate in the United States. Even Massachusetts, whose

Governor and legislative leaders just announced plans for a B5 mandate in November. would not go to B5 until 2013.

Currently no manufacturers explicitly warranty blends B6- B20. Manufacturer support will arrive as the products continue to be tested and show satisfactory results. We believe that it would be wisest to tie the mandates of B6 to B20 to the approval of ASTM specs, which are anticipated to be approved in June 2008 and to such time when a majority of oil burners are warranted for B6-B20 by their manufacturers.

In addition, the mandates set forth in Intro 594 apply to #2, #4 and #6 heating fuels. While we are encouraged by the fuel's potential, we believe that mandating bio for #4 and #6 oil at this time is premature. Instead, the city should be engaging in pilot programs within select city-owned #4 and #6 oil properties of the sort that occurred at NYPA's Poletti Power plant in Astoria. That way, we are able to gain valuable experience with these fuels, and if successful, can prompt wider private usage. In addition, incentives like carbon credits for owners of power plants and other industrial facilities that burn Bioheat must be available to promote higher usage in #4 and #6 oils.

Now let's talk about sulfur content which is a broader issue and must be approached at a regional level in order to be successful. I can sit here and tell you that NYOHA member companies would support the introduction of lower sulfur heating oil in New York City quickly and they do – but NYOHA companies are not refiners and we have no influence over what refiners are capable of producing and when. If New York City imposes its own sulfur standards on a timetable that is out of sync with the Northeastern States, the result may be devastating to the New York City consumer in terms of dramatic price increases and lack of availability of this necessary product. New York City would be competing globally for ultra low sulfur diesel that refiners are currently making for the off-road vehicle market and overseas markets. We would likely pay a high premium and it is the homeowner, building owner and business owner who will end up paying the costs. NYOHA supports the timetable put forth by MANE-VU, an 11-state northeast, mid-Atlantic coalition of governments which states the following:

- Low Sulfur Diesel, or 500 parts per million sulfur content, for #2 oil by 2012
- Ultra Low Sulfur Diesel, or 15 ppm for #2 oil by 2016
- #4 oil must be 2500 ppm by 2012
- #6 oil must be 3000 ppm by 2012

We have been told that the refiners may be capable of meeting this timeline and are currently gearing up to meet MANE-VU's requirements. We oppose any binding city legislation that would go against this timeline and place New York heating oil consumers at risk for supply shortages and uncontrolled price spikes

especially during the cold winter months. I would also like to point out that, by defining heating oil by its ASTM spec D396 which encompasses 2,4, and 6 oil, Intro 594 would have 4 and 6 oils be 15 ppm - this is simply not possible.

I would like to conclude by saying that this an exciting time for the heating oil industry, which like many industries, are seeing the benefits of new scientific developments and investments that will create a more sustainable, cleaner heating fuel. But no change is ever easy and big change must approached very carefully.

Thank you for your time.

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ENVIRONMENTAL DEFENSE
finding the ways that work

Testimony of Environmental Defense to the New York City Council, Committee on Environmental Protection

**Regarding Intros No. 594 and No. 599 – In relation to the use of clean heating oil
in New York City (Intro No. 594) and in relation to the use of bioheat in New York
City (Intro No. 599).**

Prepared by Isabelle B. Silverman, Attorney at Environmental Defense¹,
and presented a Public Hearing on January 24, 2008

Introduction

Thank you for the opportunity to testify today. Environmental Defense strongly supports efforts to reduce harmful air pollution from New York City's heating oil systems. We can improve our heating oil systems in many different ways which will result in cleaner air and costs savings. Unfortunately, the sight of black soot coming out of New York City building's smokestacks is all too familiar. New York City is a world class city that should no longer have heating systems from the last century. There is no excuse anymore not to act because cleaner technologies, such as new boilers, burners and cleaner heating oil are here today.

We should take advantage of it as soon as possible. In addition, opening windows and doors for temperature control in the winter, should also become a thing of the past. Thermostatic valves can be installed for less than \$50 so that people can simply turn off their radiators instead of opening windows. This will result in additional cost-savings. Given how hard we work to reduce diesel vehicle soot emissions from New York City's air, we also need to start focusing on smokestack emissions.

Health Risks

Heating oil emissions include more than 40 toxic substances, smog-forming emissions, soot, unburned hydrocarbons and other harmful byproducts -- many of which are known carcinogens. Heating oil emissions contribute to a laundry list of adverse health effects, including dizziness, increased incidence and severity of asthma attacks, chronic bronchitis, coughing, and symptoms associated with cardiovascular disease, cancer risk and even

¹ Environmental Defense is a national non-profit environmental organization headquartered in New York City, with 400,000 members around the country and 40,000 members and activists in New York. The Living Cities program at Environmental Defense is dedicated to practical solutions that secure clean air, water and lands in urban areas like New York.

premature death. Not surprisingly, New York City's asthma hospitalization rates are twice the national average.

Given that New York City fails to meet federal health-based air quality standards for ozone and fine particulate matter (PM_{2.5}), we need to take every step we can to clean up the air, from congestion pricing to reducing heating oil pollution.

Set city-owned building dates more ambitiously

Environmental Defense applauds the Council Members for introducing Intro 594 and Intro 599 in an effort to reduce harmful air pollution. We support the early use of bioheat in combination with low sulfur and eventually ultra low sulfur heating oil in New York City-owned buildings. We encourage the City Council, however, to set the dates for city-owned buildings earlier than this draft of the two Intros.

Clean heating oil study (Intro. 594 §6-318)

We support the idea of a clean heating oil study because certain technical adjustments to the boiler and or burner are necessary when high sulfur heating oil is replaced with low sulfur heating oil. We strongly urge City Council, however, to move the dates forward and to expand the study. Experts can easily advise the directors about the necessary technical adjustments and the costs involved. To allow 18 months for this study and then another 18 months to determine the feasibility of the results of the study is too long and will further delay cleaner air for all of us. We already know that the technology exists and that tremendous savings result from installing a new, cleaner burning boiler and burner. My condominium just replaced its boiler for about \$8,000 and is now saving over 60% on heating oil consumption. This is also reducing global warming pollution. The pay-back period is less than a year. Hence, the directors' study should also focus on boiler and burner replacement, the environmental benefits, oil savings and the costs involved. We recommend moving these dates forward as much as possible. Why wait when this is a clear win-win for everybody.

Furthermore, the study should also include recommendations for costs, fuel-savings and possible incentive programs for the installation of thermostatic control valves on radiators. We hear it all too often in New York City how people cannot control their radiators. Apartment buildings are so overheated that people need to open the windows. In 2008, this is an archaic and unacceptably wasteful way of heat temperature control. It also increases noise and pollution levels in apartments because windows need to be kept open. If landlords and coop/condo apartments were either required to install thermostatic valves or educated about their benefits, tremendous cost and fuel savings would be the result. For about \$40 per radiators, thermostatic valves can be easily installed by the superintendent or a plumber. The payback period is short, global warming pollution is decreased, money is saved and comfort levels of building residents are improved instantly.

Lastly, the study should also research whether black smoke coming out of buildings' smokestacks can be eliminated with new boilers, burners and cleaner fuel. We recommend

that the Council check with the NYC DEP about how many resident complaints have been made about black smoke coming out of buildings' smokestacks. Just from Environmental Defense's offices, we can see many buildings that release thick black smoke several times a day. Depending on the result of the study, the Council might also want to consider legislating to eliminate the release of black smoke from building's smokestacks.

Greatest benefits with local biodiesel feedstock and production

It is important to keep in mind that bioheat's environmental benefits vary greatly depending on the feedstock used. The greatest environmental benefits are achieved when locally produced waste vegetable oil (also referred to as "yellow grease") is turned into biodiesel. Because there is not enough waste vegetable oil in the New York metropolitan area, soybeans are also used as a feedstock. One of the most promising and efficient feedstock appear to be so called algae ponds.

To maximize the environmental benefits, transporting biodiesel or soybeans over large distances to satisfy a biodiesel mandate should be avoided. The more local the biodiesel can be produced, the better. The waiver provision could be used to ensure that biodiesel does not have to be trucked in far distances just to meet the bioheat mandate. Diesel trucks are typically highly polluting unless 2007 engine models or diesel particulate filters are used so trucking in biodiesel would defeat the purpose of the bill which is cleaning up the air and to promote the development of local biodiesel plants.

Biodiesel is best used as bioheat

A July 2003 Study by the Energy Research Center shows that a 20% biodiesel (B20), 80% low sulfur (500 ppm sulfur content) heating-oil blend reduces emissions of sulfur oxides by 83%, carbon dioxide by 20%, nitrogen oxides (NOx) by 20% and some particulate matter. A 20% NOx reduction with a B20 blend is much better than when B20 is used in the onroad or offroad sector. When B20 is burned in diesel vehicles, it is still unclear whether NOx emissions increase slightly by 1-2%, as per a EPA Draft report on the issue, or whether NOx emissions are unaffected. Since NOx emissions are decreased substantially when used as bioheat, we prefer that use of biodiesel.

Conclusion

Environmental Defense is committed to working with the City Council to clarify Intros 594 and 599. We look forward to continued cooperation with the City Council and the Bloomberg Administration to achieving the greatest emissions reductions and health benefits.

For questions or further information, please contact Isabelle Silverman, Attorney at Environmental Defense, at 212-616-1337 or isilverman@environmentaldefense.org.

Testimony of Carter H. Strickland, Jr.,
Senior Policy Advisor for Air and Water in the
Mayor's Office of Long Term Planning and Sustainability

before a hearing of the Committee on Environmental Protection
of the Council of the City of New York
on Introductions 594 and 599 concerning heating oil

January 24, 2008

Good afternoon, Chairman Gennaro and Members of the Committee. On behalf of the Administration, I will address the provisions of Proposed Intro 594 and Intro 599 relating to the reduction of harmful pollutants from the use of home heating oil. The goals of these bills are consistent with several PlaNYC initiatives and we look forward to working with the Council to refine them further.

Increasing the use of alternative fuels is an important component of PlaNYC's goals to reduce greenhouse gas emissions, improve local air quality, and diversify our energy supply. We do, however, have some concerns about the timing and the content of these bills. We believe that promoting the use of biofuels should move forward soon, but that we should wait to mandate a sulfur cap for heating fuels. There also need to be restrictions on biofuel to protect food crops, tropical forests and grasslands, and to ensure that the fuels we use improve our carbon footprint. Finally, we believe the opportunity exists to address the significant pollution from boilers that burn No. 4 and No. 6 fuel oils. We will address these issues in more detail later in this testimony.

We can all take great pride in the fact that the City's Department of Parks and Recreation, the Department of Sanitation, the Department of Transportation, and other agencies have introduced biodiesel to their fleets of heavy-duty diesel vehicles. Now, the Administration is ready to start using cleaner-burning, renewable fuels to heat City

buildings. Last summer, the City pledged to incorporate bioheating fuel in our heating oil purchases and to work with the Council on comprehensive biofuel legislation.

One of the challenges is that most oils used for heating today are refined from crude petroleum oil, just like diesel fuel for road applications. Unlike the transportation sector, where the EPA has mandated the use of low sulfur and then ultra low sulfur diesel, the federal government has not set standards for the composition of heating oil, which contains much higher levels of sulfur. The higher sulfur content of heating oil means that it produces more pollutants than current road fuel or other types of heating fuels. This is a significant problem in areas that rely on oil for heating, like New York City. PlaNYC estimates that the heating fuel sector is responsible for 29% of the local emissions of particulate matter. For that reason, PlaNYC commits the city to promote the use of cleaner burning heating fuels such as bioheating fuel blends, to lower the sulfur content in heating fuel, and to reduce the fuel emissions from boilers in 100 public schools in New York City.

Bioheating fuel blends – the mix of heating oil with biodiesel – do not require significant boiler retrofits or changes in the existing fuel distribution network. Our preliminary research shows that the use of bioheating fuel would lower emissions of air pollutants and greenhouse gases, reduce maintenance costs, provide other operational benefits, strengthen the alternative fuels market, support regional farmers and local businesses, and increase energy independence and the diversity of supply.

Further, bioheating fuel is biodegradable, nonflammable and non-toxic. B20 blends emit roughly 80% less soot and 75% less greenhouse gas emissions compared to standard heating oil. It also helps decrease the sulfur content in regular heating oil

because the biodiesel component contains no sulfur and thus reduces emissions by displacing sulfur-containing petroleum heating oil. In addition, biofuel requirements would diversify our energy supply and support local jobs at biodiesel refineries and distributors in the City.

The Administration believes that a graduated biodiesel provision timetable, similar to the provisions in Introductions 594 and 599, is feasible based on the current and projected state of investment in the domestic industry. Already, one local company is proposing to refine 110 million gallons of biodiesel a year, and another company is proposing to refine waste restaurant cooking oil into 3 million gallons of biodiesel a year, at two separate facilities in Brooklyn. Other, similar efforts will only be encouraged by the creation of a local market, much as the City's foresight in requiring clean cars helped develop the Nation's hybrid car market.

The safety and reliability of bioheating fuel has been confirmed in rigorous tests jointly conducted by the Brookhaven National Laboratories, the New York State Energy Research and Development Authority, the National Biodiesel Board, the National Oilheat Research Alliance, the Energy Research Center, Underwriters Limited and leading boiler manufacturers. Moreover, thousands of customers in the Bronx and throughout the City have been using bioheating fuel for years, at levels up to 20% biodiesel, without operational or other problems.

Nevertheless, we must ensure the safety and availability of biodiesel fuel—we do not want to experiment with any fuel that would leave thousands of residents and users without heat in the middle of the winter. Thus, we look forward to working on appropriate waivers should price or supply become an issue, if industry specifications

are not available to allow for contracting and quality control, and if boiler and equipment warranties would be voided. The bill should also acknowledge that blends of bioheating fuel with a high percentage of biodiesel may degrade over time, and create exceptions where oil may not be used for several years, as may be the case with interruptible service, dual use boilers or emergency generators.

In addition, as last Sunday's New York Times and other sources have documented, the production of some forms of vegetable-based biodiesel can displace food crops, increase global food prices, and promote the clearing of tropical forests, wetlands or grasslands. Clearing tropical forest is a significant contribution to greenhouse gas emissions. In addition, the production of any agricultural crop may generate greenhouse gases through the use of fossil-fuel based crop fertilizers and pesticides and the use of fossil fuels to transport fuel stocks over long distances for processing and distribution. To guard against these environmentally harmful effects, it will be necessary to apply a sustainability standard to biofuel purchases to ensure that the fuel New York City uses decreases, rather than increases, our carbon footprint and does not contribute to the global clearing of tropical forests and the related threats to biodiversity.

That is a complex undertaking. One promising possibility is the sustainability standard for "biomass-based diesel" in the U.S. Energy Independence and Security Act of 2007, which will require that such fuel have lifecycle greenhouse gas emissions that are at least 50% less than baseline petroleum based fuels. However, the EPA has yet to develop that standard, and the resolution of the rulemaking process could be years away. In the interim, we would encourage the inclusion of a pragmatic and enforceable

standard to prevent the purchase of oils from sources that are known to be unsustainable. Once the EPA promulgates a sustainability standard, we strongly believe that the City should analyze it to determine whether it could be used as a criterion for the selection of all heating fuels. At that time, it may be preferable to apply a fuel-neutral performance standard rather than to specify the purchase of one designated fuel, so that the market can sort out the lowest cost and most sustainable alternative.

The Administration appreciates the need to address the sulfur content of the base petroleum heating oil in order to reduce emissions of criteria pollutants. However, we do have concerns regarding the sulfur cap proposed in Intro 594, given the structure of the petroleum refining market and imminent developments in state and regional regulations. Unlike the biodiesel requirement, which only requires blending at points down the chain of distribution with any base stock of petroleum-based fuel, sulfur caps can only be met through industry investments in desulfurization equipment at refineries, on the order of hundreds of millions of dollars for each refinery. We have also heard from fuel suppliers that storing and transporting different products of fuel to be sold exclusively in New York City will pose a significant challenge to local distributors and that refineries are currently not making enough low sulfur diesel to supply the NYC heating oil market in addition to the transportation fuel market without causing a major increase in price.

Because desulfurization occurs at the refinery, it makes sense for entire regions to adopt base stock heating oil of the same sulfur content. In fact, the Mid-Atlantic and Northeast states have been working on a coordinated strategy for low sulfur oil in

member states, whereby inner zone states (NJ, NY, DE, and PA) will require heating oil to contain 500 ppm sulfur or less by 2012 and 15 ppm or less by 2016, with outer zone states (CT, NH, RI, VT, DC, ME, MD, MA, the Penobscot Indian Nation and the St. Regis Mohawk Tribe) on a slightly later schedule. Individual states are to implement this timeframe and enact the sulfur caps agreed to by all the MANE-VU states. The DEC's most recent regulatory calendar, published on January 2, 2008, commits the state to promulgate a sulfur cap this year. Accordingly, our recommendation is to address the sulfur content of fuel in a separate bill and under a separate timetable which can perhaps be aligned with the regional schedule set by MANE-VU states.

One alternative to specifying the sulfur content of all fuels is to ensure that the oil we do use is the cleanest that is currently available. Compared to No. 2 heating fuel, No. 6 oil contains higher levels of sulfur and other elements which cause significant air pollution and lead to adverse health impacts. For that reason, PlaNYC makes the commitment to convert at least 100 school boilers from No. 6 to No. 2 fuel oil. We also believe that it is feasible to impose a moratorium on new permits for No. 4 and No. 6 boilers, which comprise only about five percent (5%) of the new boiler permits issued by the Department of Environmental Protection annually. We would also support a requirement for the City to analyze this issue further and to issue a report on the feasibility of phasing out existing No. 4 and No. 6 boilers in a manageable and equitable manner.

We look forward to the opportunity to work with the Council on this important legislation, as well as on solutions to other environmental problems. At this time, my

colleague Kizzy Charles-Guzman and I would be happy to answer any questions that you may have.

It is important to note the difference between biodiesel and other biofuels like corn-based ethanol as well as other distinctions that make biodiesel one of the most sustainable renewable energy sources in the United States. Biodiesel can be made from a wide variety of feedstocks - ranging from what is available right now to what will be available in the near future. Today, soy farmers can use the oil from the soy bean for biodiesel while the "meal" is left intact for use in soy based food products. Canola and recycled restaurant grease are two other feedstocks that do not trade - so called - food for fuel, unlike corn-based ethanol, where the entire stalk is used for ethanol production. In the near future, at least two very exciting feedstocks are expected to flourish - algae, which has an extremely high yield and can be purpose grown on water-based algae farms and a weed called jetropha which can be grown in the Southwestern United States.

Biodiesel has had enormous success in Europe, South America and increasingly, the United States. There is now a wealth of experience, particularly with various blends of #2 home heating oil, but also with heavy #6 oil as demonstrated during a successful pilot program at the 885 Megawatt NYPA Poletti power plant in Astoria and in testing done by Brookhaven National Labs. Manufacturers, who were initially slow to embrace bio, are explicitly supporting and encouraging bioheat and biodiesel - in fact I am not aware of any oil burner manufacturer that will not stand by at least a B5 in their equipment. And I can personally report no equipment issues in any of the bioheat that Metro has sold which has included B20 for residential buildings and various blends of bioheat for #4 and #6 boilers.

The bottom line is, pending adequate supply and necessary time for area terminals to prepare their operations, there is no reason for the City of New York, which has over one million heating oil households and thousands more office buildings, not to embrace a B5 home heating oil product citywide within 2 years and eventually a B20 product citywide. The time is now.

Metro is ready to meet the bioheat challenges these Intros set forth and will soon be able to offer a significant source of in-city supply, but we are not alone in the heating oil industry and I would ask you to listen to my colleagues and consider their concerns.

But I would also caution you to remain steadfast on implementing a sensible, clean-air, renewable fuel initiative such as the one prescribed here. Biodiesel has been around for quite some time now, but it is also a rapidly growing industry - and that is the exciting part. Whatever benefits we know biodiesel to possess today, they will increase tremendously in the coming years. Metro is proud to be a part of New York's energy future and by passing legislation that promotes clean, green bioheat, the City can play a major part in securing that future. The alternative is to stay with the status-quo and that is no alternative at all.

Thank you.

Testimony of Gene V. Pullo,
President of Metro Terminals Corp. and Metro Biofuels
Before the New York City Council
Environmental Protection Committee Hearing
January 24, 2008

Good afternoon Mr. Chairman and members of the Committee. I'm Gene Pullo, President of Metro Terminals Corp., a 60-year-old family-owned energy services company in Greenpoint, Brooklyn specializing in ultra low sulfur diesel, heating oil and other fuels. Two years ago, I co-founded Metro Biofuels which sells BQ9000 certified bioheat and biodiesel throughout the New York City Metropolitan Area. Metro is now in the advanced permitting stages with the City of New York on a 110-million-gallon capacity biodiesel processing plant that we plan to break ground on in early 2008 and have up and running in 2009.

I would like to first commend Chairman Gennaro on proposing what is probably the most significant bioheat legislation in the United States. Intro 594 and Councilman Yassky's equally commendable Intro 599 represent significant steps toward reducing our dependence on foreign oil and fostering a sustainable and renewable energy source that improves air quality, reduces asthma and combats global warming. As one of the largest suppliers and leading investors in bioheat and biodiesel, Metro is a proud partner in this public/private citywide effort.

I must also take this opportunity to commend Governor Spitzer for including the penny-per-gallon Residential Bioheat Tax Credit in his Executive Budget, announced just 2 days ago. This 4-year credit, which will be retroactive to January 1st 2008 and enjoys widespread support in the Assembly and Senate, will bridge the price gap between home heating oil and bioheat and in some cases, may in fact enable homeowners and apartment building owners who use bioheat, to save money on their home heating bills THIS winter.

Biodiesel is a biodegradable, virtually zero-sulfur, and totally renewable energy source that is made from plant, vegetable or animal fat-based oils and is then blended with diesel for use in transportation fleets and with heating oil for use in buildings - also known as bioheat. Biodiesel reduces:

- particulate matter that causes asthma
- carbon emissions that contribute to global warming
- and it lowers our country's dependence on foreign oil.

The acceptance of biodiesel into home heating equipment without any retrofitting helps make it a highly viable alternative fuel. And the very high energy balance of biodiesel - nearly three times that of corn-based ethanol - makes it a truly sustainable alternative fuel source that can easily fit into - and greatly enhance - the agricultural framework of the United States including New York State, a large grower of soy - the most popular biodiesel feedstock in the Northeast.