

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

CONSUMER ELECTRONICS ASSOCIATION,
INFORMATION TECHNOLOGY INDUSTRY
COUNCIL, and ITAC SYSTEMS, INC.

Plaintiffs,

v.

CITY OF NEW YORK, MICHAEL R. BLOOMBERG,
in his official capacity as Mayor of the City of New
York, NEW YORK CITY DEPARTMENT OF
SANITATION, JOHN J. DOHERTY, in his official
capacity as the Commissioner of the Department of
Sanitation, and ROBERT LANGE, in his official
capacity as Director of Waste Prevention, Reuse and
Recycling of the Department of Sanitation,

Defendants.

09 Civ. 6583

**DECLARATION OF DANIEL M.
BUTTURINI, MBA IN SUPPORT OF
PLAINTIFFS' MOTION FOR A
PRELIMINARY INJUNCTION**

Declaration of Daniel M. Butturini, MBA

I, Daniel M. Butturini, declare as follows:

1. The following facts and opinions are true to my own personal knowledge and if called as a witness I could so testify.
2. I am a waste management professional who has been working for over 17 years in the New York metropolitan regional solid waste industry. I am a nationally recognized authority in issues related to waste management, collection, transport, recycling and other logistics related to the waste management industry in New York City, the northeast region and nationally. I received a Masters in Business Administration from New York University in 1986, and a Bachelor of Science degree from Georgetown University with a concentration in business administration/finance and economics. I have attached my curriculum vitae to this declaration.

3. I currently serve as a principal of a solid waste management consulting and mergers and acquisitions firm. As a solid waste acquisition specialist, I focus chiefly on cost accounting, efficiency, and strategic planning for solid waste management, collection, and site operations management and development. I have numerous active projects in the New York City regional marketplace.

4. Previously I was employed by Deloitte & Touche as a senior consultant where I worked with major public and private industrial and waste management companies throughout the United States. During the 1999-2001 time period, I was the Project Manager for the proposed Allied Waste/New York City Department of Sanitation Linden Facility solid waste logistics and transportation bid. I directed the design, logistics, and material handling for this proposed \$100 million waste management facility.

5. I have been asked to provide my opinion regarding the costs and logistical challenges posed by the recently enacted New York City electronic waste (e-waste) program, including Local Law Nos. 13 and 21, the implementing rules (the e-waste rules), and the accompanying forms (e-waste management plan forms or e-waste plan) (collectively referred to as the NYC e-waste program). My analysis addresses the collection provisions and the detailed e-waste management plan requirements embodied in the NYC e-waste program, and assesses the costs and logistical challenges imposed on manufacturers of electronic equipment covered by the law. I understand that this declaration will be used in support of a motion for a preliminary injunction filed on behalf of the Consumer Electronics Association (CEA), the Information Technology Industry Council (ITI), and ITAC Systems, Inc. I am being compensated in the amount of \$350 per hour.

6. In addition to my background and experience in the waste management industry, and research I have conducted pertaining to cost and logistical issues related to the NYC e-waste program, I have been provided with the following information to assist in my review:

- a) Local Law Nos. 13 and 21;
- b) New York City Department of Sanitation Notice of Adoption of Final Rules Governing Electronic Equipment Collection, Recycling, and Reuse; and
- c) Electronic Waste Management Plan Submission Forms – Instructions, and Sections P-1 through P-5.

7. My opinions regarding the costs and logistical challenges imposed on manufacturers by the NYC e-waste program are summarized below:

- a) The NYC e-waste program effectively forces manufacturers to assume the role of a waste management/recycling expert, an urban transportation/logistics specialist, and a risk manager.
- b) The e-waste plan requires manufacturers to obtain and certify collection and recycling information in a manner that is unreasonable and impracticable from a logistics and solid waste management perspective.
- c) The burdensome direct collection requirement of the NYC e-waste rules will cost manufacturers at least \$213.5 million annually.

I. E-WASTE MANAGEMENT PLAN - COLLECTION REQUIREMENTS & COSTS IMPOSED ON MANUFACTURERS

8. The waste management responsibilities covered by the NYC e-waste program were traditionally the responsibility of the New York City Department of Sanitation (DSNY) which was tasked with the responsibility to collect the City's residential waste. The NYC e-waste program forces electronic equipment manufacturers to assume and go beyond this role, by directly collecting e-waste from residents' homes, free of charge. Manufacturers also must provide, free-of-charge, a "reasonably accessible" infrastructure to accept e-waste from governmental agencies, non-profits and private companies with 50 employees or less. The costs

will be substantial, the responsibility daunting, and risks profound – all predictable given that the NYC e-waste program forces manufacturers into the province of a licensed and permitted waste collection and management enterprise.

9. The most immediate requirement that manufacturers must comply with is the submission of comprehensive e-waste management plans for the collection, handling, and recycling or reuse of covered electronic equipment (CEE) to DSNY. The e-waste plans must be submitted on extensive forms, first made available on DSNY's website in April 2009, which require the manufacturers to provide an extraordinary amount of detail and enter into significant contractual commitments. The e-waste management plan forms mandate that the manufacturers develop a transportation plan for the collection, design and management of the recycling process, and identify the entire life cycle for recovered or reused electronic items covered by the NYC e-waste law. From a practical standpoint, in order to comply, manufacturers have to vet and retain qualified and appropriate vendors for collection and recycling, design a new transportation system and on-the-ground specialty collection infrastructure, develop a method and infrastructure for tracking items and sub-assemblies to the final disposition/end-market, and implement appropriate compliance procedures. In a specialized, highly regulated field, the NYC e-waste program effectively forces manufacturers to assume the role of a waste management/recycling expert, an urban transportation/logistics specialist, and a risk manager.

10. From a cost, logistics, planning, and implementation standpoint, the most concerning provisions of the e-waste management plan are contained in Sections P.3 and P.4 which require detailed information from manufacturers on issues related to collection, handling, recycling and reuse of e-waste, including:

- **Collection methods** for e-waste items weighing 15 pounds or less (i.e., mail-back, drop-off, or direct collection program), items weighing more than 15 pounds (direct collection from residences);
- **Identification of third party companies retained** throughout the recycling, reuse, or demanufacturing process in connection with collection (direct collection from residences, transport, mail-back, drop-off) and recycling;
- **Disposition plan**, including identification of the electronics recycler, method for disassembly and recovery, product/component handled, identification of the end-market, and system for tracking the same; and
- **Certification of compliance** with all local, state, federal and international laws, regulations, and permits.

11. The collection requirements will be extremely burdensome to the manufacturers, both from a logistics and cost perspective. The e-waste program provides for at least a two-tiered process involving substantially different requirements based solely on weight and as such, will likely require manufacturers to develop at least two different collection infrastructures, two sets of vendors, and two different sets of compliance plans.

12. With regard to e-waste greater than 15 pounds, CEE manufacturers will confront overwhelming costs and numerous logistical obstacles in developing and implementing a collection infrastructure. Costs for managing the collection system include the fielding of a fleet of collection vehicles and an equal number of teams of trained staff; providing short-term warehousing for the collected e-waste materials; sophisticated communications systems; and back-office support. The logistics required for the call response, collection and processing routines contemplated by the NYC e-waste program are also staggering. Manufacturers will have to hire skilled logistics coordinators and switch-board operators to optimize the routing for collection vehicles and inform the crews of particular packaging and special handling requirements, access issues such as stairs, tight access, and pets. Finally, if broken, certain e-waste has the potential of being classified as hazardous waste (thereby implicating additional

legal requirements). Accordingly, office and field staff will have to be trained in safe transport and handling techniques, as well as emergency response procedures. This adds to the skill level required of staff and will require manufacturers to retain an on-call emergency response contractor.

13. Based on my analysis of the requirements of the NYC e-waste program and my background, experience and research on the waste transport industry, I calculate that the per unit/per pick-up base cost to manufacturers is \$121.04¹ for direct collection of e-waste over 15 pounds, assuming that non-union labor is utilized. See attached Exhibit A. The use of union labor would increase the per-unit/per-pick up cost by 11%, to \$133.96.²

14. To the extent a manufacturer elects to use the mail back option for smaller items, collection services such as Federal Express, United Parcel Service (UPS), the United States Postal Service (USPS), and courier delivery are adaptable and will likely be the most practical means of achieving the requirements of the program. These services, are not, however, feasible for returning larger items of e-waste to the manufacturers as they have restrictions as to weight and a limitation on overall package dimensions.³

15. If a manufacturer elects to use solely drop-off locations for lighter electronics (e.g. mouse, keyboard, and laptops), the process will be cumbersome and not easily obtained under the time frame provided under the e-waste program. A minimum of 59 locations must be

¹ The labor and benefits assumptions in attached Exhibit B were based on the necessity to operate two man crews driving 26-foot box trucks with lift gate capabilities to pick-up bulky, large screen televisions (average weight approximately 70 pounds) to large projection screen televisions (175 pounds or more) as described in the EPA's report entitled ELECTRONICS WASTE MANAGEMENT IN THE UNITED STATES APPROACH 1, July, 2008 EPA530-R-08-009 (hereinafter "EPA Report").

² In considering a 11% increase in the cost per pick up, I adjusted the labor wages by adding \$4.50 per hour for the driver and \$4.00 per hour for a helper on a route truck. I have assessed no additional cost impact that may be required due to work rule changes, scheduling issues or overtime costs, other than those used in the base case example. This estimate is conservative considering that a Teamster driver working in the construction trade would have a scale rate in excess of \$35 per hour, with a \$9.50 benefit package, in comparison to the lower \$24.50 per hour parcel delivery scale rate that I estimated for a union driver.

³ Federal Express has a 20 lb. limit, UPS has a 30 lb. limit, and USPS has a 70 lb. limit. With regard to the package dimension limitation, the package dimensions cannot equal greater than 165 total inches (e.g., 30"x25"x20").

established, staffed, and serviced by each of the manufacturers, so business considerations and decisions related to the leasing of space, security, and staffing are factors that need to be considered 59 times. Transportation documentation, inter-site management, and operational routines for the drop-off locations will also need to be coordinated, as the NYC e-waste program requires that the sites be “convenient” for residents. To ensure “convenience” for residents, manufacturers will likely bear significant additional costs in connection with keeping the drop-off locations open on evenings and weekends.

16. I understand, based on the analysis performed by economist Mohan Rao, that New York City’s e-waste totals 42,146 tons annually, and adjusting for that portion which is attributable to residences, and converting to pounds, a total of 50,575,200 pounds of e-waste will be subject to collection under the NYC e-waste program.⁴ Utilizing Environmental Protection Agency data, I have calculated the percentage of that number (i.e., the total annual amount of e-waste in New York City that will be subject to collection under the program) that will be made-up of smaller items weighing 15 pounds or less, and the percentage of that number that will constitute larger items weighing greater than 15 pounds. I estimate that annually, 5.2% of the total weight of e-waste to be collected in NYC, approximately 2.6 million pounds, or about 1.3 million units annually will be made up of smaller items eligible for mail-back or drop-off.⁵ The average collection cost will be \$30 per small e-waste item, or an annual cost to manufacturers of \$40.1 million.⁶

⁴ See Exhibit A. Due to the limitations and scope of the aggregated EPA data, the NYC total annual e-waste figure includes CEE as well as non-CEE. It does not include e-waste from small businesses with less than 50 employees.

⁵ These figures are derived from the EPA Report. I calculated the estimated number of e-waste under 15 pounds by using an average weight of 1.9 pounds per small e-waste item (e.g., keyboards, mice, and portable computers). Due to the limitations and scope of the EPA data, the 5.2% estimate of the total weight of NYC e-waste includes other small e-waste that is not considered CEE such as GPS, video cameras, video game systems, DVD players, digital picture frames, and other non-CEE small consumer electronics.

⁶ A survey of cost estimates provided by the major small package delivery and pick-up services as well as data provided by package express delivery and courier companies operating in NYC, showed a direct cost of pick-up and

17. I further estimate that annually, 94.8% of the total weight of e-waste to be collected in NYC or approximately 47.9 million pounds of covered e-waste will be larger items that are subject to the more onerous direct collection requirements from residents' homes. The average weight of each unit will be 37 pounds, and the total number of large units subject to collection each year will be approximately 1.29 million e-waste items.

18. The NYC e-waste management plan submission form, Section P.3.d, force each manufacturer to identify and formally commit up-front any vender which the manufacturer intends to retain for purposes of collection and transport. It is critical, from a business perspective, that manufacturers retain reputable, appropriately trained and licensed businesses to render direct collection services. The vendors will frequently interface with the manufacturers' existing or potential customer base and will transport a solid waste product in a highly regulated environment. I estimate that in order to successfully complete direct collection of larger e-waste items, it will often be necessary to enter the residence. While it is true that the final version of the e-waste rules do not explicitly mandate residence entry,⁷ the reality, given the prohibition against curbside pick-up, the size of many of the items and the intricacies of removal (*i.e.*, the effort required to move a large item, unplugging and disassembly, protectively packaging an item for transport, and the absence of any feasible location to store the item pending collection), a substantial number of collections will involve the actual entry into residences, apartment hallways, apartment buildings and private storage or basement areas because the e-waste rules prohibit curbside collection. Crossing over the threshold into an individual residence necessarily

delivery service, on a point to point basis, to average about \$20.00 per item. Administrative back office functions including operating phone banks, staffing, scheduling pick-up times, shipping label creation, specifying and/or providing the packaging materials, mailing, and other logistical support services, will add at least \$10 to that service cost. At an average of \$30 to collect 1,337,593 packages, the program cost will be approximately \$40.1 million annually for the less than 15-pound fraction of the e-waste subject to the NYC e-waste program.

⁷ Page 19 of the "Notice of Adoption of Final Rules" describes the removal of the requirement to provide the collection service by entry into the resident's home and stresses that it may not be placed at curbside for collection.

triggers insurance costs, potential human resource liabilities, and brand sensitivity issues given the inevitable interface between the delivery/transport workers and the resident/customer. These are significant, but frankly unquantifiable costs to the program. One bad vender could have serious implications – both from a liability standpoint and a brand perspective.

19. Based on a review of the NYC e-waste law and implementing rules, it is unclear whether the program requires the e-waste be transported by a licensed solid waste hauling company approved by the New York City Business Integrity Commission (BIC) and/or the New York Department of Environmental Conservation (DEC) as a waste transporter. There are only about 200 such entities approved to engage in the waste management industry in the City.⁸ Although e-waste from households is not hazardous waste under the New York State regulations,⁹ manufacturers must plan accordingly for different waste handling situations including emergencies where certain e-waste would be deemed hazardous if the item is broken – during the removal of the item from the residence, in transit, as a result of the handling practice at a recycling or reuse facility, or later on its way to reuse or disposal. In the absence of clear guidance, it is logical to expect that manufacturers would reasonably elect to retain only licensed vendors trained in hazardous waste and emergency response procedures (and have an emergency response contractor on call) for purposes of implementing the direct collection program. If that approach is selected, the labor costs discussed above and outlined in Exhibit B will be

⁸ All participants in the solid waste management industry in the City are required to file personal disclosures, undergo a background check, and comply with other requirements of the NYC BIC and laws under the N.Y. Comp. Codes R. & Regs. tit. 6, § 360 that require licensing and permitting of vehicles picking up or delivering solid waste in the State of New York.

⁹ See N.Y. Comp. Codes R. & Regs. tit. 6, § 371.1(e)(2) (“Solid wastes which are not hazardous wastes [include] household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse derived fuel) or reused. ‘Household waste’ means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households” See also N.Y. Dept. of Conservation, *Guidance for Households Management of Used Electronic Equipment by Households* (2009), available at <http://www.dec.ny.gov/chemical/42004.html> (“Used electronic equipment from households is not currently regulated as hazardous waste, however, households are strongly encouraged to make use of reuse and recycling programs.”).

considerably higher because the majority of the solid waste companies in the City operate under Teamster or Laborers collective bargaining agreements.

20. Indeed, it is in the City's interest that qualified vendors be retained. The use of unqualified people, inexperienced in waste collection, let alone the potential of handling hazardous waste, poses a far greater threat to the general public than the status quo – disposal of the City's e-waste by trained waste management professionals who are licensed and permitted by governmental agencies. Given the limited number of licensed solid waste hauling companies in the City, manufacturers may be forced to rely on couriers, haulers and other transport companies, the majority of which have no experience or appropriate equipment to participate in the collection program mandated by NYC.

21. It is also reasonable to expect that there will be consumer confusion regarding the mechanics of direct collection under the NYC e-waste program. Consistent with the requirements of the NYC e-waste program, there will be publicity and information available on manufacturer websites about individual manufacturer e-waste collection procedures in NYC. It is still likely, however, that consumers will be confused as to whom to call, and many will call the wrong contact number, the first familiar name in the telephone book or internet search, or, in the case of a list of multiple manufacturers, the name of the company at the top of the list. Under the NYC e-waste program, there is no way that the costs can be shared fairly or proportionately among manufacturers.

22. Considering my above-referenced analysis in which I determine that annually there are approximately 1.29 million large e-waste items subject to the direct collection requirement at a projected base pick-up cost of \$121.04 per unit per stop, and factoring in the additional cost of union labor from licensed solid waste hauling companies, the total annual cost

to manufacturers for the direct collection of large items covered by NYC's e-waste law is approximately \$173.4 million. Adding in the estimated cost to manufacturers associated with the collection of small items through mail-back and drop-off programs of \$40.1 million, the total cost to manufacturers to comply with the NYC e-waste program's collection requirements for residents will easily be \$213.5 million annually.¹⁰ Significantly, this estimated total annual collection cost does not include the additional expense of recycling those collected e-waste items.

23. It is also significant that my above-referenced estimate of manufacturer costs does not account for the stock piles of e-waste in storage, in closets, basements, and small business warehouses around the City. Nationally, the EPA estimates that there are 135 million e-waste units in storage, which according to my calculations would be approximately 1.89 million units in NYC.¹¹ The stored e-waste items will likely flood the system in the third year of the NYC e-waste plan when residents and businesses become aware of the manufacturers' obligation to collect such material. Adding 1.89 million units of e-waste for manufacturers to collect, a volume that is equal to more than one year of the City's accumulated e-waste, could drive manufacturers' cost of collection substantially upwards.

24. Finally, my estimate of manufacturers' costs does not account for the phenomena of missed appointments -- specifically, missed appointments by residents who fail to be home at the scheduled time, or who do not have the relevant item properly prepared for collection and/or shipping. In the pick-up and delivery industry, missed appointments are a persistent issue and penalties are typically assessed for a certain number of missed appointments. In the case of the

¹⁰ See Exhibit A. This annual cost estimate does not include the additional cost of collecting and recycling CEE from small businesses with less than 50 employees. For those businesses, the NYC e-waste rules require that manufacturers provide e-waste collection that is free-of-charge and "at least reasonably accessible."

¹¹ NYC accounts for 1.4 percent of the total population. Because the EPA Report did not provide NYC or New York State regional data on the amount of stored e-waste, I multiplied total number of e-waste units in storage nationally, 135 million, by 1.4 percent to arrive at an estimate of 1.89 million stored e-waste items in NYC.

NYC e-waste program, however, manufacturers are affirmatively prohibited from assessing such a penalty. In light of this fact, I anticipate that there will be a substantial number of missed appointments requiring multiple return trips and repeated attempts to contact residents to follow-up on a contact or to reschedule a pick-up. I estimate that that the missed appointments will increase the direct collection costs for manufacturers by approximately 20%.¹²

II. E-WASTE MANAGEMENT PLAN - ADDITIONAL LOGISTICAL OBSTACLES

25. In addition to the collection requirements, there are a number of other requirements of the e-waste plan, recycling and disposition tracking obligations that will impose equal if not greater burdens on manufacturers. The challenges presented by these problems are so profound that frankly, costs cannot reasonably be assessed. The obstacles are nevertheless immediate and very real for manufacturers, and illustrate the shortsightedness of the NYC e-waste program.

26. The NYC e-waste management plan submission form, Section P.4, mandates that manufacturers provide detailed information regarding the recycling of collected e-waste, including identifying the third party companies retained to handle the recycling, details of the recycling operations including a description of the type and quantity of each product or component that will be recycled, the recycling method, and the end market, including the identification of any country that will receive components or products for reuse. In my opinion,

¹² The incidence of missed appointments is high, even when a resident has purchased an item or appliance for delivery. I believe that the percentage of missed appointments where there is little economic benefit or personal incentive for a resident will be at least 20%. This number has been derived from my experience in the solid waste and logistics industries and from my research regarding logistics providers who serve the new appliance and small package express market in NYC. When that factor for missed appointments is applied to the annual number of units, greater than 15-pounds, likely to be in the program, the number of stops increases to 1,553,621. See Exhibit A.

compliance with the provisions of NYC's e-waste program pertaining to recycling are impractical, exceedingly costly, and ultimately unachievable.

27. Indeed, 50,575,200 pounds of e-waste, or approximately 4.2 million items covered by the e-waste program will be subject to recycling or reuse by companies operating in the private sector. The viability of the program, therefore, not to mention manufacturers' ability to comply, is subject in part to the availability of adequate dismantling and recycling facilities. In light of the recycling/reuse provision in the NYC e-waste program, there are likely hundreds of manufacturers competing for contracts and agreements with a finite number of appropriate recycling entities who are licensed, let alone qualified to do the work. The search for a company to handle a manufacturer's CEE is further complicated by the fact that currently, there is no comprehensive state or federal e-waste regulation or licensing process to help manufacturers distinguish reputable entities from the less qualified ones. Nor does the City provide any guidance by identifying acceptable final end uses that will satisfy the requirements of the NYC e-waste program.

28. In fact, there are no licensed "electronics" recyclers in NYC, and there are only 40 dismantlers and recyclers of used electronic equipment in the State of New York, two of which are located in NYC. States surrounding New York do not provide extensive e-waste management facilities to support the NYC e-waste law either. In New Jersey there are eight regulated (sited and permitted under the NJ solid waste materials recovery and transfer facility laws) Class D Recycling Facilities and 28 registered facilities that are not authorized to demanufacture e-waste items.¹³ Only Class D facilities that are subject to federal and state Universal Waste Rules are permitted to demanufacture consumer electronics. N.J. Admin. Code

¹³ A registered facility is a facility that is registered with the US EPA and the state to handle Universal Waste but not permitted to demanufacture consumer electronics. N.J. Admin. Code 7:26A-1.3.

7:26A-7. These facilities operate under very stringent regulations and are audited monthly by regulatory agencies. Connecticut also has three registered used electronic disassemblers in the state. In sum, the NYC metropolitan region does not have adequate facilities to support the massive amount of e-waste that will likely be generated by the NYC e-waste program.

29. In addition to challenges related to the small number of recycling companies, it will also be nearly impossible for manufacturers to negotiate a reasonable contract price with recyclers because of the volatile price of recyclables, and the fact that the NYC e-waste program forces manufacturers to negotiate contracts up-front, with little room for modification. The value of used electronics, subassemblies and components (*e.g.*, metals, glass, and other materials contained in the e-waste stream) fluctuate daily and may vary materially over the course of any monthly or annual period. The market outlets for this commodity and all other recycled commodities are fluid and are a function of price, distance, and commodity trading pricing. Because of the volatility of the market, the recyclers will likely negotiate contracts that will shift the risks of the fluctuating recycling commodities markets to the manufacturers thereby resulting in higher contract prices for the manufacturers – yet another disadvantage manufacturers will have to face in complying with the NYC e-waste program.

30. NYC e-waste management plan submission form Sections P.4.b mandates that for each product/component, the manufacturer identify the end market, including the percentage of products/components that will be sent out of the country, and the country that will receive them. The process for determining the disposition of manufacturers recovered products and components will be cumbersome and fraught with the potential for liability, especially in light of the fact that Section P.4.h requires manufacturers to certify compliance with all applicable laws.

31. In fact, the type of information elicited on the NYC e-waste management plan forms with regard to disposition of manufacturer products cannot be predicted with any reasonable degree of accuracy for a long term “final” reuse or disposal program such as the NYC e-waste program. As discussed above, the market for e-waste and its subparts is constantly changing with regard to who is an outlet or buyer of this type of recovered or recycled material. Vendors also change, as do commodity prices and shipping locations.¹⁴ The bottom line is that it is not possible to know where a piece of recycled electronic equipment will end up except perhaps on the load that is packed and moved to a specific end user today. In light of the way the e-waste market functions, it will be impractical, if not impossible to accurately complete NYC e-waste management plan submission form Section P.4.h. Indeed to require manufacturers to do so places manufacturers in jeopardy with the separate program requirement that they certify to the accuracy of the information submitted in their e-waste plans, and compliance with all local, state, federal and international laws.¹⁵ The constant modification and changes to end use destinations, markets, countries, brokers, or to the processes used to recycle the products would require constant updates and modifications to the e-waste plans. Although the e-waste law allows a manufacturer to modify its plans, the City may not agree with the proposed modifications, leaving manufacturers having to proceed at risk.¹⁶ This is a completely impractical requirement.

¹⁴ Much of this material is sold via an existing broker network, they distribute to thousands of potential end users, and sometimes, when the value declines, that material goes for disposal as a cheaper alternative than storage and re-shipping the material to another destination.

¹⁵ Practically speaking, contrary to the goal of the NYC e-waste program, the likely result of asking the impossible from the manufacturers, is that less material will be recycled or reused and a higher segment of the waste will be sent for disposal in other states without e-waste disposal bans because recyclers would have to make space available for incoming recyclable material that has a greater value or has cost factors that are more easily quantified than the e-waste from residences and small businesses.

¹⁶ For issues relating to collection, a manufacturer may not even implement the modification until the City first approves it.

32. In summary, from a solid waste and logistics management perspective, the NYC e-waste program is simply unworkable given the unrealistic and burdensome transportation mandates, the inherent logistical challenges, the unreasonable amount of collection and recycling information and certification required for the e-waste plans, and the overwhelming implementation costs.

I declare under penalty of perjury that the foregoing is true and correct, and if called upon to do so, I could and would so testify thereto.

Executed this 4th day of August 2009 in Ridgefield, CT.


Daniel M. Butturini, MBA

Curriculum Vitae

DANIEL M. BUTTURINI

**429 NORTH SALEM ROAD
RIDGEFIELD, CT 06877**

**Office: (203) 438-5682
Dan@DMBEnvironmentalConsulting.com**

**DMB Environmental Consulting, Ridgefield, Connecticut
Principal, February 2003 to Present**

Provide environmental consulting services to a variety of prominent clients in the private equity, banking, solid and liquid waste and waste brokerage industries. Engagements focused on strategic planning, merger & acquisition, financial valuation and financial planning and analysis assignments. Engagements included projects in the following areas:

- Provided deal sourcing and generation activities
- Provided financial and strategic analyses and recommendations for proposed deal structures
- Provided assistance with respect to raising debt, equity and mezzanine financing sources in support of the proposed transactions.
- Performed financial valuations, by means of ten year profit and loss, balance sheet and cash flow projections.
- Developed Descriptive Memorandum for proposed transactions
- Provided competitive analysis detailing a listing of key competitors' principal assets and their competitive positioning in various marketplaces
- Provided Due Diligence coordination assistance
- Provided assistance with negotiation of Letters of Intent
- Provided assistance with negotiation of Stock Purchase or Asset Purchase Agreements
- Provided interface with investment bankers, financial advisors, consultants, engineers and attorneys for due diligence and purchase related activities..

ALLIED WASTE INDUSTRIES, Tyngsboro, Massachusetts

Director Project/Market Development, February 2000 to January 2003

Managed large-scale waste development project with \$3 to \$6 billion revenue anticipated over time. Facility designed to accept New York City waste via barge; to be unloaded, compacted, containerized and transferred via rail to distant landfills. Managed and directed project team of financial, engineering, operations, legal and public relations experts dedicated to project activities. Primary interface with investment banks, bond counsel and Allied Waste Senior Executives. Acted as Market Development Representative for New England Market Area.

- Managed the design, development, and construction of \$100 million Linden Facility. Work efforts included development of permit applications and environmental impact assessments for the State of New Jersey.
- Negotiated long term agreements with major subcontractors including barge, unloading and rail operations.

- Managed development of comprehensive public relations and governmental affairs campaign. Approved media campaign and the use of opinion polls and focus groups to assess campaign effectiveness.
- Expanded market area presence and drove the strategic integration of acquisitions into the New England market area. Identified and valued target companies including transfer station, hauling, and recycling centers; via detailed long term financial projections. Negotiated all business terms and letters of intent. Directed all legal, financial, engineering, governmental compliance, tax and audit support functions necessary in support of acquisitions.

WASTE MANAGEMENT, INC., Elizabeth, New Jersey
USA WASTE OF NEW YORK CITY, Brooklyn, New York
Manager of Business Development, July 1996 to January 2000

Negotiated and closed over 25 acquisitions with first year revenues exceeding \$125 million. Significantly expanded initial market presence, provided strategic integration driving company to a lowest cost/market leadership position in the New York/New Jersey Metro area. Duties and responsibilities included the following:

- Targeted acquisition candidates via extensive financial, strategic and competitive analyses.
- Performed financial valuations, negotiated business terms and letters of intent for all transactions.
- Directed all legal, financial, engineering, governmental compliance, tax and audit support functions supporting the acquisition process.
- Managed Executive Committee and Board of Directors packages for each acquisition as required. Teamed with operational line management to insure successful integration of the new acquisition into the company's operating structure.

WASTE MANAGEMENT OF NEW YORK, Brooklyn, New York
RESOURCE NE, INC., Brooklyn, New York

Director of Financial Planning and Analysis, August 1992 to July 1996

Member of senior management team involved in the strategic sale of the largest waste processor in the New York Metro area. The sale culminated in a \$250 million offer by WMX Technologies, Inc., a Fortune 100 company.

- Negotiated with four public waste management companies. Developed financial and strategic analysis and recommendations to proposed deal structures/offers. Key interface with investment bankers, financial advisors, consultants and attorneys for due diligence and merger related activities.
- Developed a sophisticated enterprise model reflecting all aspects of the collection, processing and recycling elements of the largest private, New York Metro area waste management firm. Basis for annual budget and five year strategic plan.
- Provided financial analysis/strategic planning support function. Responsibilities included merger and acquisition, divestiture, capital expenditure, municipal bid proposals and special projects.

DELOITTE & TOUCHE, Stamford, Connecticut
Manager/Senior Consultant, October 1987 to July 1992

Involved in a variety of general management consulting engagements the specifics of which are as follows:

- Developed a sophisticated project financing model for a client engaged in the development and construction of a hazardous waste chemical plant. Evaluated project economics by means of fifteen and twenty year profit and loss, balance sheet and cash flow projections. The model served as the definitive source for all client decisions with respect to project economics, waste supplier and bank negotiations. Conducted extensive sensitivity analyses for the client and managed all financial, tax and audit support functions.
- Performed an economic impact study of proposed legislation for the introduction of riverboat casino operations in the state of Pennsylvania. Quantified one-time construction and ongoing spending including direct and indirect expenditures, employment, infrastructure and tax revenues at the city, county and state levels.
- Provided a comprehensive valuation analysis for a client attempting to complete a management led, leveraged buy-out of a national video production/post production firm. Developed extensive ten year profit and loss, balance sheet and cash flow projections. Provided recommendations with respect to all phases of deal structuring and financing.

McGRAW-HILL INCORPORATED, New York, New York

Director/Manager Financial Analysis, March 1986 to September 1987

Performed a comprehensive financial analysis/strategic planning support function for merger and acquisition, divestiture, capital expenditure and special project analyses for the senior management of the McGraw-Hill Information Systems Company. Developed financial and strategic analyses and recommendations for proposed deal structures/offers. Key interface with McGraw-Hill senior executives.

UNITED TECHNOLOGIES CORPORATION, INC.

NORDEN SYSTEMS, Norwalk, Connecticut

Senior/Financial Analyst, Computer Products Center/Avionics Products Center,
October 1980 to January 1984

Provided an integrated financial control function in support of Computer Products and Avionics business units. Responsibilities included the preparation, control and analysis of orders, sales, gross margin, functional cost expenditures and functional manpower requirements over a five-year period. Selected to the United Technologies Financial Analyst Program.

EDUCATION

NEW YORK UNIVERSITY, Graduate School of Business Administration

MBA Finance, January 1986

Extensive coursework in Corporate Strategic Planning and Computer Application and Information Systems

GEORGETOWN UNIVERSITY, School of Business Administration

BSBA Finance/Economics, May 1980