



# NEW YORK STATE ASSOCIATION FOR SOLID WASTE MANAGEMENT

Established 1975

August 10, 2010

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Dear Ed;

Thank you for meeting with representatives of the New York State Association For Solid Waste Management on Wednesday, August 4, 2010, about our concerns with the State's Beyond Waste Plan.

We are attaching our comments on the Plan that reflect many of our members' concerns. Overall, NYSASWM believes that the Plan needs major revisions before it can be finalized and distributed for implementation. There needs to be a financial impact assessment of the Plan's recommendations and initiatives so that the public can accurately assess the cost of this Plan. Our members have conservatively estimated that the Plan will cost many billions of taxpayer dollars to effectively implement. In addition, the Plan's goal for waste reduction and recycling needs to be adjusted (lengthened) to recognize today's economic reality.

Our Board members have identified the attached list of items that we believe would make an effective State Solid Waste Management Plan. We would be happy to assist the Department in crafting them into the Beyond Waste Plan.

NYSASWM recognizes the effort and time that have been invested in developing this Plan and commend the Department staff who worked to put it together. We hope that these comments and others from our member municipalities help the staff focus on improving the Plan and modifying it into one that we can fully support.

Thank you again for the opportunity to meet and discuss this Plan.

Sincerely,

Michael Wolak, President

cc: Val Washington  
Resa Dimino

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Member of THE FEDERATION OF ♦NEW♦YORK SOLID WASTE ASSOCIATIONS  
Affiliate of The New York State Association of Counties



## New York State Association For Solid Waste Management

Comments on Draft Beyond Waste Plan  
August 10, 2010

**An Outline for Action:** NYSASWM has developed a set of recommendations that it believes should be incorporated in the state's new solid waste management plan. These recommendations are concisely presented below.

1. DEC should take over public education for recycling, since most communities are recycling the same materials. Remove this burden from local recycling programs.
2. Retain the economic markets test. It has worked and should be continued.
3. Improve data collection, compilation and publication of solid waste/recycling data and program details. Publish an annual report. This would provide a more complete picture of what is currently happening. It will also help spread the word about innovative programs and implementation approaches that other communities can learn from. This is a realistic goal that can be achieved within the next five years.
4. DEC needs to improve data collection re deconstruction, tire recycling/reuse, and other recycling activities that are not part of local public recycling programs. Without this data the State really doesn't know what the status quo is.
5. The State should undertake a state-wide waste characterization study. Other states have done this; NYS should do this to obtain better data for decision-making and to remove this burden from local planning units.
6. The State should have a goal of pushing for federal packaging stewardship programs, to help make sure that NYS does not become an even more expensive place to live and work.
7. The State Plan should provide a better defined prioritized list of products to be covered by future product stewardship legislation. It should focus on the hard to manage, toxic, and radioactive materials. This would be a reasonable legislative action plan.
8. The per capita metric may be useful on a state-wide basis, but it becomes more problematic at the planning unit level since it does not take into account differences in tourism levels and other seasonal influences on waste and recycling tonnages.

9. Reinforce the hierarchy and the neglected energy from waste component. Energy from waste is higher on the hierarchy than land disposal, but Beyond Waste puts them on the same bottom rung of the hierarchy.
10. Exported waste should be re-directed to new energy from waste facilities during implementation of this plan.
11. Minimize waste exportation. The State should aspire to be self sufficient for its long-term solid waste management programs. Develop policies and funding that will support long-term self sufficiency, and do the same to provide support for local integrated solid waste management systems and programs. This will help conserve energy and reduce GHG emissions.
12. The modern landfill is an anaerobic digester, it just takes longer. Provide more flexibility in the permitting process for landfill bioreactors and other innovative ways to manage organic wastes.
13. Beyond Waste assumes resources will be available to implement the Plan. But if those resources are not available the local planning units should not be required to implement the programs called for by the Plan.
14. State agencies and facilities should be required to abide by local flow control laws and local solid waste management plans.
15. PAYT should not be mandated. It should be a local decision.
16. The State should provide full funding for HHW collection programs, including pharmaceutical collection programs.
17. State agencies should lead by example by implementing and paying for infrastructure called for by Beyond Waste. As part of this implementation program, the State should partner with local planning units to seek better economies of scale. State and local officials will learn a great deal about actual costs and environmental impacts/benefits by working toward the implementation of important solid waste and recycling infrastructure that can serve a community.
18. The state's solid waste management plan should explicitly and clearly say that it will not be used by the DEC or other state agencies to require a planning unit or permit holder to develop infrastructure that is not deemed economically or technically feasible by that planning unit/permit holder.



## **New York State Association For Solid Waste Management**

**Comments on Draft Beyond Waste Plan**  
August 10, 2010

### **General Comments:**

1) **Funding and Costs:** Throughout the Plan there are initiatives that identify the need for specific facilities, programs and changes to existing solid waste practices that will require additional financial and technical resources. The Plan also identifies a number of possible funding mechanisms that are purported to meet these needs. Unfortunately, the Plan does not select one (or more) mechanism that will come close to actually meeting the funding need, nor do the mechanisms identified appear practical in the current economic climate. As an example of this concern, using the waste composition and generation information provided in the Plan, approximately 10,000 tons of organic waste (consisting of food scraps and compostable paper) is generated each day in the state. State-wide, the implementation of digestion and composting facilities to handle all of this organic waste would require an investment of approximately \$2.2 billion dollars – just to build the facility infrastructure. This cost estimate does not include facility operation and maintenance costs, nor does it include any additional costs to pay for new or modified equipment that may be required to provide for the separate collection of organic waste materials.

This one example of potential cost underscores the need to provide a financial analysis of the proposals identified in the Plan. Solid waste managers in NYS have estimated that this Plan will cost billions of dollars to implement, yet the Plan does not address how this is to be funded, where the funding will come from and what alternatives exist if state resources are not adequate to fund this Plan.

2) **Plan Implementation:** This Plan seeks to reduce the amount of waste disposed (burned or buried) by 90% in 10 years. No entity has ever come within 25% of that level, even when including all solid wastes, not just MSW, in working for the last 20 years that waste reduction, reuse and recycling have been standard practices in solid waste management programs. The only way that goal could ever be met is if 100% of every initiative is 100% effective and 100% of NY's population participates in making it happen. Unfortunately, history has shown that for solid waste programs that is not a realistic projection. The Bottle Bill, as an example, has shown that even with economic incentives, New York State residents will only participate at the 70-75% level. Factor in the current fiscal difficulties of NYS and the local governments that struggle to maintain basic services without large tax increases, and the possibility of spending billions of dollars to redirect how our solid waste is managed is unrealistic. DEC needs to step back and reevaluate the feasibility of the Plan's goals and factor in realistic and practical timeframes and goals.

3) **Waste Characterization:** It seems that DEC has used different numbers throughout the years to identify the amount of waste generated, reduced, reused, recycled, exported, landfilled and combusted. The Plan blames it on inaccurate reporting but the bigger problem is that DEC has never taken the time to

determine how and what must be reported by whom. Until DEC makes this determination, all numbers are suspect, including those reported to DEC, those calculated by DEC and those reported in the Plan.

The Plan should provide a methodology to standardize all reporting, require it of all waste management entities, and collect and collate it for at least two years in order to have an accurate idea of what is truly generated and handled in NYS.

4) Greenhouse Gas Calculations: The Plan makes most of its claims for environmental benefits on the back of the greater amount of greenhouse gases generated by the current waste management practices.

Yet in attempting to derive the same numbers used to justify the Plan's goals most of the references are not specific nor based on real measurements of actual operating facilities. In fact, models that the Plan even states are inaccurate are used to justify the need to spend billions of dollars to construct and operate new facilities that do not have any track record of generating less GHG. The Plan also glosses over the data that shows that Municipal Waste Combustors (MWC) may generate less GHG than composting certain wastes.

5) Municipal Waste Combustors: There is nowhere in the Plan that DEC acknowledges that MWC are a preferred waste management processing facility. WHY? This technology has a proven track record of meeting its emission limits, generates energy, and reduces the amount of material requiring disposal by 80-85%. As identified above, for combusting certain waste streams, MWC's generate less GHG's than composting. Yet MWC are not recognized in the Plan as a viable waste reduction/disposal method. This needs to be addressed in the Plan.

6) Technology Assessment: The Plan identifies anaerobic digestion as well as other thermal processors for managing the organic waste portion of the waste stream. Yet many of these technologies have proven less than ideal when scaled up from bench models and when fed with real waste materials. Before DEC requires any municipality to implement organic processing DEC needs to perform a complete technology assessment, including evaluation of costs, environmental impacts, GHG generation, reliability, energy utilization and generation, end product stability, and marketability. To expect local governments to expend taxpayer funds to construct such unproven technologies is not a reasonable planning goal.

7) Waste Bans: The Plan suggests the utilization of waste bans in order to force recovery/recycling programs. On the whole waste bans are either not necessary or can be a detriment to sound waste management practices. When appropriate waste management facilities are available to reduce, reuse, recover and recycle portions of the solid waste streams, a waste ban is meaningless since there exists the capacity to manage the waste cost effectively in places other than landfills or WTE facilities. A ban can be problematic when, due to unforeseen circumstances, the infrastructure for managing the waste is unavailable, then there is no alternative except waste export or long term storage if it can't be landfilled or incinerated for energy. Sound waste management strategy provides for reasonable, cost effective alternatives and waste bans force unreasonable, and expensive management practices. A sound Plan will not suggest bans, but provide for an infrastructure that accomplishes the same goal, diversion of waste.

8) Waste Surcharges: One of the title proposals for funding local government's costs to implement the Plan is a surcharge on tipping fees for disposal activities. This practice will be met with very stiff resistance at the local government level for a variety of reasons. First, local governments are already struggling to keep the cost of their integrated management systems competitive with the cost of private waste management disposal facilities, and in fact are already cutting staff and programs to ease the financial burden upon their constituents. Second, it has been the experience in NYS that funds collected by the State are generally not made available in full, back to those who generated the income. Two recent examples are the Waste Tire Fund and the Environmental Protection Fund that have suffered in the last few years when the State needed funds to balance the State budget. Also, when examining any

proposal that requires the State to collect funds that will then be returned via grants or awards, there is a cost to the State that the funds must absorb. There is a State cost to collect the funds, develop and issue programs to disburse the funds, applications for funding to review and approve, and finally, administrative costs to manage the entire process. Therefore, for each dollar collected, only a portion is returned to those that initially pay the dollar. The Plan needs to find another way to fund the initiatives described in the Plan.

9) Mandates: Throughout the Plan there are recommendations and findings that state, during LSWMP reviews, or during facility permit reviews, the initiatives and goals in the Plan will need to be addressed by the applicant or planning Unit. This raises many warning flags to local governments that the DEC will be looking for local government to actually put in place the infrastructure to implement the Plan before approvals will be granted. This form of persuasion has become standard practice in obtaining compliance with non-regulatory initiatives that the State has determined to implement. This Plan will be used to further this practice and force significant costs onto local governments, regardless of the financial support the State may (or may not) provide.

**Specific Comments:** This section contains many comments that apply to specific statements contained in the Plan. There is duplication of some of the comments as the Plan contains duplication of statements and initiatives. Where possible, the comments are directed to a very specific sections, others are directed to a whole subsection, and therefore not as specific.

**Page 5, Executive summary, Paragraph 2, Last Sentence** The Plan seeks to decrease reliance on waste disposal facilities. Based on the infrastructure put in place as a result of the 1987 state SWMP, the goal should be to extend the life span of existing facilities to make them last longer, rather than to eliminate them altogether. Environmental controls have been built into these disposal facilities at great cost to local governments. Virtually eliminating them does not make economic or environmental sense.

15% waste reduction every two years and a 90% recycling rate by 2018 is unrealistic.

As landfill operators, it is hard to be in agreement with all organics being composted since many landfills have long-term contracts now in place that are utilizing organics to help in the methane gas production process, have invested millions of dollars to ensure their gas is being collected and have gas to electric projects that require the methane to run. Several landfills are bio-reactor type landfills (similar to a compost facility), with environmental controls already in place, i.e. leachate collection and treatment. However, not all compost facilities have these types of environmental controls in place, because they are classified as “exempt,” with nothing in place for leachate treatment, or liners to prevent the leachate from seeping into the groundwater, while this is required of landfills. Compost facilities should fall under environmental requirements too. Also recommend that statistics on organic waste (compost) sales, as well as studies on the contaminants (pesticides and herbicides) in the final product be provided.

Landfills and Waste to Energy facilities have invested millions of dollars to control the gases from their facilities and believe that the numbers being reported on GHG are not accurate.

The Plan wants to re-emphasize the importance of LSWMPs – many planning units followed their LSWMP by investing millions of dollars to build infrastructure to support an integrated solid waste management program, yet the Plan states it is going to prioritize investment – how can that be accomplished considering the economic status of NYS?

**PAGE 6; 1.1 GOALS** “Waste generation equals 4.1 pounds per person in NYS”; This number does not apply to all planning units and is based on assumptions and incomplete data. DEC must compile complete and accurate waste data before any recommendations can be made. If nothing else, DEC must develop a uniform system of accounting for waste and recyclables and apply it consistently across the State. For twenty years 60+ planning units have each compiled numbers in a wide variety of ways making the State’s summary numbers impossible to trace or replicate -- the current numbers are meaningless and cannot even remotely be used to formulate a statewide Plan.

**PAGE 6; 1.1 GOALS** The Plan does not appear to factor in recycling in excess of 6 million tons of MSW from NYC and Long Island.

**PAGE 6; 1.1 GOALS** The Plan suggests that recycling and composting programs could be funded from disposal fees, but does not address how to make up for the loss of revenues when disposal is reduced by 15% every two years. This could devastate local public systems and completely eliminate the source of funds for recycling. Local Government integrated waste management systems are what has produced the results for recycling and are what DEC relies on for all of the progress in recycling. If this “goal” were not so profoundly unrealistic it would be worrisome that DEC fails to see this connection. What is DEC recommending for funding of the programs when tipping fees are dramatically reduced?

**Page 6 (7<sup>th</sup> bullet)** – Many landfill and Waste to Energy facilities are already doing this (*Maximize the Energy Value of Materials Management*) but does not appear to be addressed in the Plan.

**Page 7 (1.2 Materials & Waste Management in NYS 1987 to Present)** - It seems that the Plan has a very one sided philosophy that does not accept the reality of the present waste management systems that have been put in place at the cost of millions of dollars based on a philosophy that was promoted 20 years ago by the same agency (NYSDEC). Planning units followed this philosophy and are now being told that they must make drastic changes and spend many more millions of dollars in the process. Also, waste bans should not be proposed unless the infrastructure is in place to manage all the waste that will be banned.

**Page 8** – The Plan fails to address that the management of materials or waste is a regional marketplace that is not constrained by municipal or state boundaries.

**PAGE 9; 1.3 MATERIALS AND WASTE MANAGEMENT IN NYS 2009** The percentages presented are highly misleading. Waste reduction since 1987 appears to be ignored. The Plan randomly chooses to discount reported recycling numbers and adopt others, making the numbers “guesstimates”, not factual. A state Plan cannot be credible unless it is based on consistent, reliable data. Since the passage of the Solid Waste Act of 1988 the DEC has failed to develop a uniform method of accounting for waste and recyclables and without such a method any Plan is meaningless. Also there is a vast difference between planning units and their accomplishments. DEC should differentiate between NYC, Long Island and the rest of the state.

**Page 9 (1.3) Last Bullet says** “Recycling has stalled in the last decade” – The Plan does not take into account lightweighting of packaging, less weight and higher volume appear to “stall the recycling rate”, when in fact, waste reduction has risen. The Plan needs to reflect this fact.

**Page 9** – Side bar reference, citing The Grass Roots Recycling Network in regards to *Substituting recycled paper for pulp from trees* – The Grass Roots Recycling Network website notes that landfills are “a cancer on the land.” This runs counter to what DEC promoted as far as construction of environmentally protective landfills. The Plan should not be using such biased references to justify it’s goals. When the

1987 Solid Waste Management Plan was developed, the state called for planning units to develop infrastructure to handle their waste locally. (Also GRRN referred to as footnote #6 on P. 18.)

**Page 10** – The conclusion that the current operating NYS landfills are large emission sources for GHG is not supported by the actual data. Landfills contribute only 4% of the GHG as reported later in the state Plan and fail to acknowledge that the landfill emissions segment is the only segment to show significant reductions over the recent term.

**PAGE 10; 1.3 MATERIALS AND WASTE MANAGEMENT IN NYS 2009** *“USEPA ESTIMATES THAT 42% OF NATIONAL GHG ARE INFLUENCED BY THE LIFESTYLE IMPACTS OF THE PRODUCTS AND PACKAGING THAT BECOME WASTE”*

The DEC’s characterization of the data is misleading, which completely undermines the ability to present the State Plan as an environmentally based approach. The USEPA report provides that 42% of GHG generated is due to the life cycle of the manufacture of consumer goods. The same Plan provides that the composting of 100% of food scraps in the US will have a 0.2% favorable impact on GHG emissions, and composting 100% of MSW will have a 4.3% impact. DEC must revise the data in order to provide a straight forward document, rather than characterizing referenced data in a manner that is misleading to the public.

**Page 10** – Economically viable infrastructure to manage the materials recommended for diversion from the current landfill or waste to energy facilities does not currently exist in proximity of the major waste generation centers within the State. Since the cost of such facilities is beyond the reach of most local governments, the State needs to take the initiative to develop the economically viable infrastructure to manage these materials near these major waste generation centers.

**PAGE 10; 1.3 MATERIALS AND WASTE MANAGEMENT IN NYS 2009** Implementation of PAYT is glossed over with a reference to an EPA document that is 20 years old. The Plan does not address how PAYT would be implemented in places such as NYC, or in rural areas where the experience has been that people will throw their garbage in the back yard, burn it in burn barrels, or toss it on the side of the road, rather than pay higher fees. The Plan also does not address how recycling will be funded when tip fee revenues are reduced as a result of waste reduction, other than to suggest that “markets will be created”.

**Page 10 (1.3)** – As to the well established recycling industry meeting the challenge of developing new markets for recyclables, while there has been progress, this statement is overly optimistic, as markets for glass, tires and plastic bags, among other items are lacking. Also, the appendix states that Empire State Development has been unable to perform follow up on projects that obtained funding through that agency as to long lasting impacts due to staffing shortages, so who has identified that these “well established markets” continue to exist?

**P. 10** - The implementation of source-separated recycling programs has been inconsistent, not only from one community to the next, but also in different settings such as schools, businesses, and public spaces. The Plan is trying to “homogenize” recycling programs throughout the state and is not taking into account the different circumstances in each planning unit – financing approved by local legislators, private recycling efforts, as well as availability of local markets.

**P. 10** – “Continuing reliance on waste disposal—landfills in particular—comes at a significant environmental and economic cost; landfill gas contributes to climate change, and continuing to dispose of materials that could be reused or recycled squanders opportunities to create jobs, conserve energy and natural resources, and reduce air and water pollution.” This is an extremely generic statement which does not take into account the millions invested in infrastructure, including recycling programs, by many

planning units and ignores the fact that billions more will need to be invested in a new infrastructure that may not be as environmentally sound as that which it replaces.

**P. 11 (1.4.1)** - require incentive programs (e.g., PAYT/SMART). Strongly disagree with mandating this throughout the state. There are too many differences in local government programs that make this broad type of statement impractical.

**PAGE 11; 1.4.1 LEGISLATIVE RECOMMENDATIONS** *“THE PLAN SEEKS CHANGES IN LEGISLATION TO ACHIEVE THE PLAN’S GOALS”* A full EIS and economic analysis must be conducted on the impact of the Plan. Legislation is exempt from SEQRA and the legislature must be informed on the consequences of the proposed legislation. The DEC has a responsibility to assess the economic as well as the environmental impact of a proposal that calls for a statewide infrastructure that will process a proposed 12 million tons of MSW annually.

**Page 12 (1.4.1)** – The state should not look to the local planning units which have invested millions into their infrastructure and that rely on disposal fees to operate their facilities, to contribute to the financing of the state’s solid waste programs. Local governments are already overburdened by high taxes and get less state aid when environmental funds are “swept” for the State’s general fund.

**Page 12** – The value of Product Stewardship is to allow the party evaluating their purchasing options to understand the true life cycle costs of the competing products but in any event it will be the consumer who will bear the additional cost for this shifting of materials management responsibilities.

**PAGE 12; 1.4.2 REGULATORY RECOMMENDATIONS** *“UPDATE REQUIREMENTS FOR CONSTRUCTION AND OPERATION OF SOLID WASTE MNGMT FACILITIES TO BETTER PROTECT THE HUMAN HEALTH AND ENVIRONMENT”* We have been told by the DEC that NYS regulations are among the strictest in the country and our residents and local officials rely on the fact that if facilities comply with these regulations they are safe. Is there a problem with the current regulations? Where do regulations need to be improved to accomplish “better” protection than currently exists? No technical/quantitative basis is presented for increasing the regulations.

**PAGE 13; 1.4.3 PROGRAMMATIC RECOMMENDATIONS** *“OUTREACH AND TECHNICAL ASSISTANCE”* The Plan proposes significant implementation of new technologies and Solid Waste Management practices, but the Plan does not provide any technical information on any of the proposed technologies. Before the Plan is finalized, DEC must provide a technology assessment for use by the planning units. It is counterproductive and duplicative to make each planning unit do its own technology assessment for a state mandated program. Paragraph 27-103(g) and (h) of the ECL require DEC to assess resource needs (g) and assessment of alternative resource recovery practices (h). The Plan does not address either, at what point will DEC come forward with this information?

**Page 13** – The Plan’s emphasis on the state agencies improving their programs is laudable but a greater state wide benefit could be derived if these state agencies included capacity in these expanded waste reduction, recycling, composting, and digestion programs for acceptance of materials from the surrounding planning units.

**Page 13 (1.4.3)** – Combat Climate Change – The Plan states here that connecting to the grid is a good thing, which is done by landfill gas to electric, so in effect, LFGTE does contribute to combating climate change.

**PAGE 15; 2. BEYOND WASTE: A NEW VISION ETC.** Waste generation numbers are different than those presented on page 6. Why?

**PAGE 16; 2. BEYOND WASTE: A NEW VISION ETC.** *“IT IS PROJECTED THAT 74,000 JOBS WILL BE CREATED THROUGH RECYCLING OF AN ADDITIONAL 12 MILLION TONS OF MSW. REFERENCE IS MADE TO APPENDIX 1 FOR EXPLANATION”* Appendix 1 provides a link to the NERC website and a Table-A, Table A projects recycling of over 16 million tons of MSW by 2018. The Plan needs to clearly identify how the numbers it uses are generated. Almost all of the quoted numbers for job creation, GHG reduction, carbon storage, and energy preservation etc. are allegedly pulled from reports referenced in the Plan, however none of the data is clearly available in the referenced reports and therefore appears to have been manipulated when used for the Plan. DEC needs to provide a clear explanation for all the quoted benefits and reductions used in the Plan.

A claim is made that for every 1,000 tons of recycling 6 jobs are created. The reference is to an RW Beck report. The referenced number appears to have been derived through interpolation of the data in the report: *“1,100,000 jobs created and 174 million tons recycled equates to 6 jobs per 1000”*. The DEC fails to take into account that the data states that most of the jobs are created in the remanufacture of recycled goods. It should be noted that a large percentage of the remanufacture of recycled goods takes place overseas and will not create jobs locally. The DEC is ignoring that it proposes to implement an entirely new composting industry for which little data is available. Is DEC suggesting that 6 jobs will be created for every 1,000 tons composted? Clearly the numbers need to be revised and presented in a more responsible manner.

*“FOOTNOTE #7”* This footnote states that an explanation of the methodology is provided on how the figures were arrived at. Appendix 1 does not provide any such thing; one paragraph and a table is all there is for explanation. All the numbers are based on a Table (A) with hypothetical numbers, which are then entered in an online website calculator. No explanation, result or even the level of validity of the web based program is provided. If local governments were to use that NERC program for an EIS or permit application, it would be challenged and dismissed. Or will DEC allow communities to use that NERC program for an EIS?

**Page 16 – Product Stewardship:** What will be the impact upon the State’s economy and the current waste management programs if the product manufacturers elect to not operate within the State or if consumers elect to go outside of New York to purchase products that do not have these end of life expenses assessed at point of purchase?

**Page 16 –** Does a city, town, village or county that doesn’t do waste collection have the legal authority to mandate that private companies operating within the municipality charge based upon a “Pay as you throw” basis?

**P. 17 (#3) – Comprehensive recycling – improve enforcement –** There is no explanation anywhere in the Plan of how enforcement will be improved and there is no acknowledgement of the financial burden of an enforcement component. This needs to be addressed.

**Page 17(# 5) - Beneficial use is already being used by landfills throughout the state.** How much CO<sup>2</sup> was used to save the 3.7 million tons of MSW recycled? Is there a number that was used when making these statements? The carbon footprint for recycling is not addressed in any calculations. There are trucks on the road to collect recyclables, equipment run to process materials and trucks used to transport processed recyclables to market, all contributing to green house gases. See same premise in **Page 41, 4.1 –** What is the GHG inventory influenced to recycling a product? This is simply out of the equation. There is collection, processing and even more transportation costs for recycling. Again referenced in **Page 51, 4.3 –** Once again, where are the GHG emissions for compost, recycling and reuse being factored into these numbers?

**PAGE 21; 2. BEYOND WASTE: A NEW VISION ETC.** Table 2.1 suggests reducing the waste stream by more than 16,000,000 tons by 2018. Such a goal is so unrealistic that it undermines the credibility of the entire Plan. The DEC apparently thinks that local governments will build organics recovery facilities -- even though the technologies are unproven and operating experience doesn't exist, and even though NYS local governments are buckling under the financial pressures created by NYS mandates and regulations -- at a pace no other public works projects have ever been done. And the DEC apparently thinks that product stewardship is not an approach to ease the financial burden on local governments, but rather is a transformation of the socio-economic structure of the country that will in eight years mean that manufacturing will cease to make products that are ultimately discarded as waste. It is clear that the NYS Plan sets goals beyond realistic and does not address costs, infrastructure and ancillary environmental and regulatory problems. Clearly an environmental impact study and an economic feasibility study must be performed in order to give the Plan legitimacy.

**P. 25-26 (3.2 Roles & Responsibilities)** - The executive order requires agencies and authorities to appoint a sustainability and green procurement officer. Has each agency fulfilled this requirement? Is there a list of all the locations where NYS sends its different waste streams?

**Page 26** – The State Plan should be specific regarding how each of the State Plan Goals will be implemented.

Given this major shift in waste management policy, local planning units may choose to disband their solid waste programs, sell their solid waste system assets and leave solid waste management to the State and private sector. How would this affect the implementation of the Solid Waste Plan?

**Page 27 (#5)** – The Plan notes that the present state Plan was to take its cue from local SWMPs that noted obstacles to carrying out the state Plan guidelines. It does not appear that this was done in creation of this Plan, as local circumstances and financial situations were not taken into account in developing this draft Plan.

**Page 29** – The implementation of an effective Product Stewardship program may have financial impacts upon the existing local recycling programs which rely upon certain of these materials for income.

**Page 29 (3.2.2)** – LSWMPs varied in term from 10 to 20 years. Why is the state promoting 10-year planning periods, when in actuality, 20-year planning periods would be more desirable from a financial and practical viewpoint? The Plan should recognize that some planning units have long life spans for their existing technologies, and should be allowed to project a 20-year planning period.

**P. 33 (3.5)** – While the state admits that waste reduction and recycling related programs have been chronically underfunded, the Plan calls for local governments to supply more funds to the state if a disposal fee is mandated. This is unrealistic given the state's financial outlook, and the lag time between grant submission and reimbursement.

**Page 33** – The question of the validity and accuracy of the data generation is key to being able to make solid decisions regarding what has happened in the past and what we are trying to accomplish in the future. The DEC doesn't have defensible or definitive data from many of the areas within the solid waste management system but it isn't apparent that this State Plan will correct this failure. Standardization of the data collection for all solid waste management facilities and on-line reporting of the data should be developed by the state and included in this Plan.

**PAGE 35; 3.8 ENFORCEMENT & 3.9 INCONSISTENT IMPLEMENTATION** This section represents a gross generalization of perceived problems with implementation of the “act” and or inconsistencies with local implementation of LSWMPs. DEC needs to be more specific on where they identified problems. Resolving those should be the top priority of the state’s Plan.

Why is there no analysis on why communities have not realized the intended results of the act? An analysis as a part of the state planning process will give insight on the possible success or failure of the current proposed Plan.

NYS is not a homogenous community; Long Island and the greater NYC area and upstate differ from each other and are vastly different communities. Unfortunately, this is not reflected in the Plan. The Plan states that recycling results differ due to “*lack of uniformity in local implementation*”. The DEC must investigate recycling success and or failures relating to the difference in lifestyle and population density and incorporate scenarios that may have success in regions that show low recycling rates and lack of implementation.

**P. 34 (3.6)** - The planning unit reports have been underreporting material processed at private recycling and waste transfer and disposal facilities. To correct this problem, the state should be responsible for this data, as private recycling and waste transfer & disposal facilities that are permitted or registered by the state should have the responsibility of reporting to the state. The state should not rely on local planning units to provide this information.

**P. 34 (3.6)** - It is important to evaluate one community against the next and to evaluate the state’s progress in comparison to other states. (The state **MUST** allow for unique circumstances within each planning unit, as no two programs are alike.)

**P. 35 (3.8)** “As state solid waste planning staff and resources have diminished, DEC’s oversight of LSWMP performance and updating has suffered. Nonetheless, the regulatory tools to create a vibrant and meaningful state and local solid waste management planning program remain in place to be more fully used and enhanced. Most particularly, the LSWMPs must have relevance and rigor beyond the permitting of facilities.” This over generalized statement has no meaning and should be explained or removed.

**Page 36** – The State must get broad residential support for these changes or the local municipal program staff will not be able to convince the municipal officials of the need to undertake any of these changes.

**Page 36 3.10** –“Planning units can help to stabilize markets by providing a consistent supply of clean, uniform recyclable materials and entering into long-term supply agreements with local or regional markets.” Some municipalities have moved away from long term agreements, as having the ability to spot market items keeps the markets competitive and brings the best prices. Being locked into a long term contract only creates problems when markets vacillate. The Plan should not dictate how a planning unit markets the wastes they collect, this decision should be left up to the locality based on their unique circumstances.

**Page 37** – Has the State completed an evaluation of the costs and merits of all of the specific program changes identified in the Plan and developed a prioritization of the changes to assure our investment in resources and staff will have the greatest benefit to the environment or protection of public health? If so, it is not clearly articulated, but needs to be.

**PAGE 37; 3.12 FINDINGS** “*DEC MUST UNIFORMLY APPLY PLANNING REQUIREMENTS STATEWIDE*” How can “uniformity” be part of the equation when DEC has never been able to apply rules and regulation uniformly? (Every permit has its own set of site specific conditions) All planning

units are different and cannot be treated in the same manner. Does DEC have a Plan on how to overcome the disparity between planning units? What is the track record for DEC overcoming disparities among different state agencies?

**PAGE 41; 4. GHG AND MATERIALS AND WASTE MANAGEMENT** *“OVERALL, WASTE PREVENTION, REUSE, RECYCLING AND COMPOSTING ARE BETTER PERFORMING MATERIALS MANAGEMENT STRATEGIES FROM A GHG PERSPECTIVE”* This statement is not correct according to EPA data as referenced in the Plan. EPA gives combustion of organics a higher benefit from a GHG emissions perspective than composting. Why is there no reference in the Plan to the data that gives combustion with energy recovery a more beneficial rating than composting?

DEC has not provided an environmental assessment on the alleged benefit of composting vs. other technologies, EPA provides data that credits GHG reduction of 0.2% when all (100%) of food scraps are composted. Has DEC performed an economic analysis to determine the investment and operating cost of composting compared to the benefits of other technologies (combustion and landfilling)?

**PAGE 41; 4.1 WASTE CONTRIBUTES TO GLOBAL WARMING** A litany of figures and references is provided in this chapter. None of the numbers are clearly available in the referenced documents. DEC must provide information on how the figures were compiled. The referenced GHG inventory by NYSERDA cannot be found. Waste To Energy is presented as a more beneficial technology for the treatment of food and yard/tree waste in the referenced EPA documents. Why is the DEC leaving this information out of the Plan?

**Page 41 (4)** – Landfills are the last resort for managing waste, yet they have no recent data of the GHG emissions for landfills with gas to electric facilities used in the analysis. Landfill owners are now capturing gases much more efficiently than the data being used for the calculations. Shouldn't there be actual studies on newly designed landfills with actual data and not data based on EPA models? In order to perform any useful comparisons, the Plan needs to provide data on how much GHG is produced in the remanufacturing of products from recycled materials, as well as data on GHG production in composting, including transportation to the site, processing (grinding, windrow turning) and trucking to market.

**Page 43** – The Plan needs to address the possibility that emission for recycling could easily be doubled as these materials are typically ½ the weight. This fuel/carbon issue seems to be omitted.

**Page 45** – Once again, how were the recycling numbers for GHG determined?

**PAGE 45; TABLE 4.1** It appears that the Plan randomly jumps between data sources and does not provide information on how data is compiled. Why is there no consistency in the presentation of the numbers?

**PAGE 46; 4.1.2 RECYCLING** Statements: “Recycling one aluminum can conserves enough energy to power a television for three hours” and “recycling avoids production of GHG emissions associated with handling and disposal through conventional waste disposal methods” The first statement is highly suggestive and serves little purpose as no data is provided to back this up. The second statement is contrary to EPA findings. Transportation and handling are the same for recycling and waste. Why is the Plan not factual in its reporting of data?

**Page 46 4.1.3 Composting and Organics Recycling** - From a climate perspective, recycling food scraps, through composting or anaerobic digestion, also has advantages compared to landfilling. (But not necessarily when a landfill is harnessing the methane to produce electricity). We contend that anaerobic

digestion is occurring in the landfill system. Also, sale of electricity brings revenue to subsidize recycling programs.

How many well run composting facilities provided data for these calculations and with what type of environmental controls are they operating? The Plan mentions compost is a valuable product, yet is has not substantiated this claim by providing lists of actual markets and quantities marketed.

**PAGE 47; 4.1.3 COMPOSTING AND ORGANICS RECYCLING**

This section is a gross over-simplification of the treatment of food scraps and organics through composting and recycling. According to tables presented in appendix A the state proposes to recover 2,900,000 tons of food scraps and 828,000 tons of yard waste and 479,000 tons of undefined “wood” waste, which may or may not be suitable for composting. In order to successfully compost food waste, bulking agents must be used with the food waste in a ratio of at least 1:1 up to 1:4 depending on the composition of the food waste. Composting of 2.9 million tons of food waste would therefore require between 2.9 million and 11.6 million tons of wood waste. Assuming all wood waste listed in the DEC’s chart is used as bulking agents, optimistically 1.3 million tons of food scraps could be composted, assuming that all the yard and wood waste is suitable and available near the compost sites. Of course no assessment has been performed to determine the feasibility of such an undertaking nor has the impact been evaluated of transportation and preparation of this wood additive needed to compost food waste, nor has the environmental impact been assessed of site run-off, air emissions, odors, and transportation of the finished product. That leaves 1.6 million tons of food waste to be treated without the necessary bulking material. One must conclude that treatment is to be anaerobic digestion. Again, treatment of food waste through anaerobic digestion is not sufficiently addressed. The chapter states “transportation distances favor composting vs. combustion” (without justification), however, the same is not addressed for anaerobic digestion. Anaerobic digestion of food waste brings issues with it that are not addressed here. For one: after digestion the remaining material still needs to be composted. What materials will be used? The Plan states (page 49) that landfill gas to energy faces financial issues because of the cost of the systems and problems with connecting to the grid. Anaerobic digestion generates methane that needs to be recovered and this technology will face the same problems as a landfill gas to energy project. These cost issues are not addressed in the Plan for anaerobic digesters. In order for these anaerobic digesters to be “cost effective” they need to be scaled accordingly. Communities may not generate enough food waste to justify an economically scaled unit. When several communities join in for an anaerobic digestion project, transportation issues will be similar to the Plans’ statements in regards to combustion. Why is the Plan not addressing these substantial issues in regards to these technologies? Anaerobic digestion and composting of 2.9 million tons within the next 8 years will have significant environmental and financial impacts which are not addressed in the Plan. Any proposal of this magnitude must be accompanied by a feasibility analysis, and an environmental impact statement.

The Plan refers to the European experience with anaerobic digestion (over 90 in use) however there is no information provided for GHG generated. How many tons of CO<sub>2</sub>e/ton of food waste digested and what is the number for tons of CO<sub>2</sub>e/kwh generated. Why is this information missing?

**PAGE 48; 4.1.4 MUNICIPAL WASTE COMBUSTION** *“AS WE MOVE BEYOND WASTE BIOGENIC MATERIALS WILL BE DIVERTED FROM WTE THUS REDUCING THE BIOGENIC ADVANTAGE OF COMBUSTING THOSE MATERIALS”* Why is the DEC promoting a treatment technology (composting, its feasibility statewide is not addressed by the Plan) to reduce the volume treated at a WTE facility when the GHG benefits of WTE are significant?

The benefits of wholesale composting of all organics have not been evaluated. The lack of an EIS for in excess of 4 million tons of composting proposed by the Plan supports that there is no proven benefit to compost rather than combustion.

The Plan does not address whether an existing waste disposal infrastructure including a WTE facility benefits from diverting organics for composting, environmentally or financially. From a transportation viewpoint alone one would have to conclude that additional collection routes would increase the contribution to GHG inventory.

Currently yard waste is banned from WTE facilities, yet the information presented in the Plan indicates there is a benefit to combustion of wood materials vs. composting. Based on this, why isn't the Plan proposing to lift the WTE ban?

**Page 50 (4.1.5)** – SCS study shows 50% – 99% collection efficiencies, depending on the specific landfill. Since all new landfills would be state-of-the-art, with environmental controls and gas collection, wouldn't they be in the higher range of GHG collection (90 to 99%)? The Plan mentions industry initiatives are under way to better measure actual performance of GHG collection systems, yet the Plan uses the old inaccurate numbers to justify the need to remove organics from landfills.

**PAGE 51; 4.2 FINDINGS** The findings are grossly negligent in addressing the feasibility of what is proposed. Also there is no finding of WTE's benefit even though it has been recorded in the information provided in the Plan. Data referenced in the Plan repeatedly puts WTE on the same level of environmental benefit as composting. This oversight needs to be corrected.

The findings arbitrarily elevate anaerobic digestion as the most reliable method of methane abatement from landfills, yet no data is presented to support this finding. The findings also ignore the real problem with the lack of ingredients to be able to compost the quantities of materials proposed in the Plan. How is the DEC proposing to implement composting without providing a realistic assessment of the availability of necessary ingredients?

**PAGE 52; 4.3 RECOMMENDATIONS** The recommendations section refers to section 8 for the "detail" on a "host" of recommendations. There are a host of recommendations, however there is a gaping lack of detail provided to back up the financial and environmental impacts of expanding the recycling and treatment of more than 12 million tons of MSW. Why is the DEC promoting a Plan without investigation into the feasibility and perceived benefits of the Plan?

**Page 52, 4.4 – As to diverting organics from landfills:**

Many landfill gas to electric contracts are multiple years with assurance for gas production. If organics are removed, this would impact methane production, as these systems have already been installed to reduce GHG emissions. The Plan needs to address these types of considerations.

**Page 53** – The statement "Collection in Product Stewardship Programs must be free" is misleading. The shifting of the materials management expenses to the manufacturer will in reality be shifting these expenses to the consumer who purchases the manufacturer's product.

**Page 54 (5)** - A similar deposit based system for lead-acid batteries followed suit, and subsequent product-specific programs, such as the waste tire abatement program, have assessed fees on product sales to address remedial issues. Tire fees have not wholly gone toward the remediation programs, but have been used by the state in other areas. This practice is of concern to local governments where locally generated fees will be taken by the state and only partially made available to localities for its intended purpose.

**Pages 55 – 69 (NY Product Stewardship Council, Section 5)** – Fourteen pages of this document are devoted to a newly developed program that has less than one year of existence. To base a substantial portion of the Plan on this concept as the "cure all" is quite ambitious and probably unrealistic. Landfills

and WTE have been around for decades and yet have hardly been mentioned in the Plan as a viable management tool. P. 66 – product stewardship, framework legislation etc. – NYPSW is a new organization which has been in existence just over a year. Relying on this “young” organization to bear the brunt of the state’s Plan is ill advised. While we do support product stewardship (obviously, since NYSASWM promoted its creation) we support it as one of many solid waste management tools. Product Stewardship takes legislation that has proven to be time consuming and difficult and may not always have the desired result

**Page 57** –The Plan needs to address “orphan” materials. It has been our experience that when the consumer does not have a convenient system for the management of these materials at their end of useful life, they become an illegal dumping problem (i.e. tires, appliances). These costs will then be borne by the local municipalities or State to clean up.

**Page 57** – Product packaging serves several different purposes which present several competing issues for product labeling, content shipping protection, loss prevention and tamper resistance. How will the Packaging Stewardship policy implementation assure manufacturers are still able to achieve all of these competing requirements to protect our residents, the ultimate consumers?

**P. 58, (5.1.3)** The State Government Role – the state proposes banning items to advance Product Stewardship. If there is a sound PS system, banning is not necessary—they will not enter the waste system in the first place. Banning of any item is not a sound management technique.

**P. 58 (5.1.4) The Role of New York State’s Citizens** – “No product recycling or end-of-life management program can succeed without the participation of the consumer. Just as most New Yorkers have become familiar with recycling programs and understand the wisdom of recycling, once they are introduced to the concept and logic of product stewardship, it should not be difficult to persuade them to participate.” If only it were that easy! This is an oversimplified statement.

**P. 59 (5.2.1)** - DEC is currently developing regulations to set operating standards and requirements for electronics recyclers. Who will enforce the regulations, once promulgated?

**Page 59** – E -Wastes have been effectively managed in most of the local recycling operations for many years. The issue that remains is what happens to these materials once they leave the control of the local recycling program and go into the recycling/reuse/demanufacturing process. How will DEC make sure that the materials are managed safely and in an environmentally sound manner?

**PAGE 61; PHARMACEUTICALS** What is proper destruction of pharmaceutical waste? DEC currently recommends combustion. Will that continue to be the strategy?

**P. 61 (5.2.2)** – HHW days and grants – Request that if there are changes in eligible items collected in HHW programs (i.e., discontinuation of funding for latex paint, alkaline batteries, electronics etc.) that planning units are notified prior to the exclusion, not after they have submitted reimbursement requests. Also, if grants are no longer assured – this will impact future municipal programs.

**P. 65 (5.2.4)** To increase recycling and reduce dependence on disposal, manufacturers must embrace materials’ efficiency and design for recyclability concepts, and recycling programs must capture more of the material targeted and include additional materials. Finances and viable markets often times dictate addition of materials to the recycling program. There seems to be an overriding disconnect in this Plan between increasing recycling and the financial implications.

**PAGE 65; 5.2.4 PACKAGING AND PRINTED PRODUCTS** “few programs have added other packaging materials such as rigid plastic packaging to the core list” Communities have little or no influence over what is recyclable or not, adding packaging to the list of collected recyclables serves no purpose without a market for the material.

**Page 67** – While carpet is readily recyclable, it is currently difficult to recycle due to the excessive transportation costs to get the collected carpet to a site where the material can be processed and recycled. This is a similar situation for mattresses also.

**Page 67**—Add tires as a potential product stewardship item.

**Page 74** – It would be beneficial for all if the DEC funding of Material and Education Programs could be teamed with ESD, ESU, NYPA and NYSERDA funding to target regionally located market industries that will be key to progressing the waste diversion efforts.

**PAGE 76; 6.2.2 EIP RESULTS** Appendix 6.2 covers a period of 20 years of funding and projects. The EIP report states that none of the projects have been followed up on after completion. There is no way of knowing that the numbers listed on this page have any validity. In the past 20 years there has been an exodus of business from the state. Has DEC verified that the recycled tonnage, and the jobs, and the environmental benefits created at the time of the funding are still realized today? Has an analysis occurred to determine failure and/or closure of businesses no longer continuing with the practice for which funding was provided?

**Page 76 (6.2.3)** – The draft Plan calls for more staffing for ESU. The same condition exists for local planning units, the desire for more staffing, but financial constraints prohibit it.

**P. 78 (6.3) FINANCING THE MOVE *BEYOND WASTE*** “To advance the goals of this Plan, the state and its communities will need resources well beyond what is currently available. While New York State can implement certain elements of the Plan within existing constraints, additional staff and funding at both the state and local level are critical to increasing reuse and recycling and reducing dependence on disposal. While the Plan does not dictate the precise methods that communities and planning units in the state will use to move *Beyond Waste*, DEC estimates that a significant financial investment will be necessary to achieve its goals.”

This statement is grossly oversimplified. Financial resources are an issue with State and Local Governments such that programs are struggling to exist let alone significantly expand. The Plan seeks a massive expenditure on both the State’s part and on local governments part that is so far beyond the reach of either that it is totally unrealistic. Counties, cities and towns are struggling to keep their basic services operating and staffed yet the Plan calls for billions of dollars of investment in a system that currently isn’t broken. The Plan needs to refocus on what is currently possible with limited expenditures and then look far out in the future to begin to restructure the waste management system.

**Page 78 (6.3.1) Existing and Potential State Funding Sources 6.3.1 (a) Environmental Protection Fund:** The present waiting time for most grants is 9 years. With funding being continually “swept” from the EPF, how does this Plan expect to shorten the wait time for grant funding to allow funds to flow to municipalities?

**Page 80 (6.3.1)** – Disposal fees – taxes of \$.25 to \$8.25 per ton of waste disposed.

Municipal programs should be exempt from any fees, as they currently use all the fees to fund the existing recycling programs.

**PAGE 80; SOLID WASTE DISPOSAL FEES** “\$100 MILLION PER YEAR CAN BE GENERATED WITH \$5 PER TON DISPOSAL FEE” The Plan provides data that 14.6 million tons of MSW are disposed of in NYS. At \$ 5 per ton, this would provide \$73 million not \$100 million. When communities that already recycle are excluded, even less money will be available. Why the discrepancy? In 2018 DEC suggests that only 2.2 million tons will be disposed of in NYS. That leaves only \$11 million to support recycling of more than 12 million tons. Where will the needed funds be generated as the tonnage disposed decreases?

**Page 80** – It would be beneficial to the reader to provide the financial data for the three bond acts to identify where the money went, when the grants were issued and when the funds were actually distributed. There has been a significant impact upon the development of various solid waste projects based upon the length of time between project grant application and actually receiving project reimbursement payments.

**Page 81** – Did the state Plan consider a stepped disposal fee based upon the effectiveness of the waste diversion, waste reduction and recycling programs?

**P. 81 (6.3.1) – facility permit fee** – This as nothing more than another burden to municipalities which are already cash strapped and should be removed from the Plan.

**Page 82 & 83, 6.3.1** – Permit Fee of \$1,000 to \$100,000 and the DEC monitor fee is discussed again. The size of a landfill should be quantified/specified before a DEC monitor is required – recommended minimum size of 2,000 tpd.

**P. 83 - 6.3.2 (b) Pay as You Throw/Save Money and Reduce Trash (PAYT/SMART)** – will the state take the lead in trying to convince local municipalities to convert to PAYT and SMART? Planning Units cannot dictate to a member municipality how it will cover the cost of fees charged by that planning unit.

**Page 83, 6.3.2 (b) – PAYT** – Works for some, should not be mandated as systems vary. Where is the 3 million ton drop figure or 40% coming from, if PAYT is implemented? Is the Plan using the numbers that are being misreported?

**Page 83** – Please provide the documentation for the statement “most municipalities in NYS fund their solid waste and recycling programs using general revenues derived from property taxes”.

**PAGE 83; 6.3.1(F) UNCLAIMED BOTTLE DEPOSITS**

Funding waste reduction by means of recyclables that are thrown away seems counter intuitive. Why does the state rely on funding through items that are targeted for reduction?

**PAGE 83; 6.3.2(B) PAYT/SMART**

Rural communities have experienced opposite results from the claims made. Raising disposal costs even by small margins results in back yard disposal or illegal burning or dumping of solid waste. DEC cannot currently enforce their new ban on backyard burning. The Plan needs to consider the environmental impact of such actions.

**PAGE 83-88; FUNDING SOURCES**

It does not appear much thought has been given to local circumstances and issues related to the funding of programs that will not yield revenue. Generating funding through disposal fees, while targeting the

elimination of disposal, will leave a void. As the revenue from waste disposed dwindles and recycling/composting increases, what does the Plan propose for alternate funding? Since DEC funding is reduced and NYS further reduces funding to local municipalities for a variety of programs, local municipalities are forced to increase taxes. Local legislators and tax payers will not be in a position to provide more taxes in order to pay for the programs to move “beyond waste”. How realistic is it to assume that NYS will provide funding without burdening the localities? The Plan needs to address how “beyond waste” will not become another unfunded mandate.

**Page 84, 6.3.2 (c) – Sales Tax** – What is the tonnage of the Delaware County Compost Facility? At what cost has it been to produce this material? The \$22 million investment plus O & M needs to be presented, and how much material actually has been reused and sold.

**P. 84 (6.3.2 (d))** - Most private subscription services are simply not structured to incentivize waste reduction and recycling. Once again, the playing field is not level, and the gap will become even wider if the state forces PAYT/SMART on municipalities.

**Page 85 - 6.3.2 (f) Generator Fees and Other Direct Municipal Charges** - The main benefits of municipally operated or contracted collection, as compared to private subscription service, are reduced truck traffic and cost savings that result from collection efficiencies and economies of scale.

What does this mean and how did the Plan arrive at this assumption?

**Page 85, 6.3.3 (a)** – Carbon offset potential for recycling and composting. This is very optimistic as even for methane reduction, it has been very difficult to get these credits. The Plan states this is a reliable financing mechanism which is a volatile market, to say the least.

**PP 86 & 87 (6.4 & 6.5)** - findings and recommendations: – While this is philosophically desirable, there needs to be more specifics outlined as to HOW this is going to occur given the current state of the state’s finances.

**Page 89** – In the late 1980’s a large waste collection company undertook an assessment of the location of the generation of waste materials and the location of the existing waste materials management capacity and then undertook a projection of the waste/materials generation changes over a twenty year time frame to determine the likely areas of excess or limited waste/materials management capacity and/or conversely where the location and type of solid waste/materials management capacity will be needed. Has the State undertaken this type of planning assessment? Shouldn’t this type of a study be done for NYS as a part of the State Plan?

**Page 90 (7.1)** – This analysis uses only favorable data to get its point across. This is another example of making the numbers fit the Plan’s goals.

**PAGE 94; FIGURES 7.4 & 7.5**

What does the vertical axis represent in these tables? It appears that the number for “disposed” (Table 7.5) is greater than the number “generated” (Table 7.4)

**PAGE 96 7.2.4 PLASTIC** “*ACCORDING TO NERC THERE ARE 20 PLASTIC RECLAIMERS IN NYS*” Please provide the information on these 20 reclaimers and whether they actually are still in business.

**PAGE 96 7.2.6 TEXTILES** “*MANY TEXTILES ARE READILY TECHNICALLY RECYCLABLE*” What does this mean and why is there no technology assessment provided for the various means of textile recycling?

**PAGE 96 7.2.8 GLASS**

There is no mention of the lack of markets or secondary uses for glass. What is the state doing to create markets for recycled glass?

**Page 96/97 (7.2.5)** – Wood – the Plan lists furniture as a wood recyclable item, yet under the state’s own clean wood acceptable list, municipalities can’t take plywood or any painted/stained lumber. Therefore, how can furniture be acceptable for recycling?

**Page 98 (7.3.1)** – Bioreactor landfills are never mentioned in the Plan. Basically these are a composting operation within the environmental controls of landfill design that also have effective, efficient gas collection systems that reduce GHG and the demand on fuels by producing electricity. Wouldn’t this be a positive discussion to add to the Plan, or since it is a technology that would support landfilling, it is not addressed?

**Page 99 (7.3.1)** –The state’s approval of land applied septage has raised a lot of environmental concerns. The same contaminants can be found in septic systems as in sewer systems. Chemicals, pesticides and pharmaceuticals may be in these systems, which are now being land applied. This should be addressed in the Plan.

**P. 100 - 7.3.2 Scrap Metal** – What will the state be doing to obtain statistics from scrap metal dealers?

**PAGE 100 7.3.2 SCRAP METAL**--The report freely compares NYS recycling rates and other parameters of solid waste management statistics with other states in order to illustrate “poor and stagnant” recycling rates. However a significant amount of metal is recycled and left out of the equation for the recycling rates in NYS. Numbers on food scrap and yard waste are freely used for compiling “data” for the purposes of the Plan. Where the same “methods” are used by planning units, to provide the numbers for scrap metal (estimates and assumptions), these numbers are discounted. This is another example of the Plan’s using only the data that supports its conclusions, rather than being consistent.

**Page 101 (7.3.3) – Tires** – The Plan should identify the dollar figures from the \$2.50 surcharge from the 2003 Tire Recycling Act and detail how much has actually gone to tire clean ups. This would be a great point to illustrate municipal concerns on the collection and use of solid waste related fees/funds.

**PAGE 101 7.3.4 C&D DEBRIS** Beside the fact that the data used is not relevant to NYS, the Plan does not address the problem of allowing C&D to be used as “ADC” in landfills. This exempts landfills from counting the material against the permitted capacity of the landfill and provides rock bottom disposal rates that are conflicting with incentives for recycling of C&D debris. Why is this aspect of C&D disposal ignored?

This chapter also does not distinguish the differences between upstate and downstate (this shortcoming applies for most of the Plan). Downstate may have processing facilities and upstate does not, this is due to local circumstances, which the Plan chooses to ignore. Downstate generates C&D mostly from construction while upstate generates C&D mostly from demolition. The Plan needs to address these differences.

**Page 102 (Figure 7.8) – C&D debris** – It is hard to believe these numbers are accurately being reported as highway departments and DOT, etc. do not report these numbers as a disposal item since often times the grinding and reuse of this material is for road base. Once again, this seems to be an estimate by the state.

**Page 108 (7.3.4) – Asbestos** – The Plan mentions better guidance for the homeowner, yet DOL & DEC have very distinct differences in the way they allow handling of asbestos. DOL requires all kinds of rules, training, notification and handling procedures and fees, while DEC has been known to give out exemption letters for asbestos products that once in a container are considered simply C & D. How would this be handled in the recycling world? Isn't the safest disposal a landfill?

**PAGE 110 7.3.6 INDUSTRIAL WASTE** The Plan devotes two (2) sentences to the “industrial waste” category. According to the Plan this section generates 3.5 million tons of waste. What is the DEC proposing in order to accomplish 90% reduction of this waste? Page 41 states: “*for every ton of MSW disposed, 71 tons of industrial discards are produced*” Table A in the appendix provides for 18.3 million tons of MSW generated; at 71 tons of industrial waste produced for every ton of MSW, there should be approximately 1.3 trillion tons of industrial waste to deal with, why the discrepancy? DEC needs to provide a clear explanation on how it arrived at the 71:1 ratio since this number is not provided in any of the reference material.

**Page 112 (8.1)** – The state implemented waste prevention, reuse & recycling, yet they just started complying with their own regulations from 1991 in the last year. Will local governments have the same 18 years to respond to this Plan?

**Page 113 (8.1.1)** – The Plan uses EPA numbers and DEC numbers to identify how much waste may be generated and how much may be reduced in this section. It is once again not an accurate picture of what is the target for this Plan. The continued use of different numbers to try and justify the Plan's goals is confusing and not realistic.

**Page 114** – The State is a member of several groups (TPCH) that have solicited industry input in the development of consistent legislation with the northeast region of the country. Would the State use this approach (the multi State approach) for the implementation of the “Beyond Waste” Plan initiatives?

**Page 115** – Without the addition of significant financial and state staff resources, this proposal is most likely to cause an unfunded mandate upon local government and solid waste businesses at a time when neither has the ability to absorb these expenses. It is recommended that the implementation of the Plan be conditioned upon the State allocating a defined minimum level of funding.

**Page 115 (8.1.3) – DEC Outreach** – If DEC's outreach efforts were as successful as they claim, why didn't the numbers come in as projected? The Plan says their goals were not met, yet here they say they did an excellent job promoting waste prevention & recycling. This needs further clarification to be believed.

**P. 117(8.1.7) Recommendations** – “As we move *Beyond Waste*, the state and its solid waste management planning units must implement the wide range of actions listed below. Fully realizing these recommendations will require additional resources—both financial and human—at the state and local level.”

The entire premise of this Plan hinges on more money coming from the state to fund programs and hire people. Given the dire economic status, it seems that the foundation of this report is on shaky ground, while at the same time, suggesting additional ways to tax the local units of government or planning units, to sustain these goals. Local municipalities have for the past 20 years been doing just that, and are no longer in a position to carry out the state's edicts by providing more funding while watching EPF funds and bottle bill monies being swept away to plug holes in the state's budget.

**Page 118 (8.2) – Reuse** – Are there any supporting data associated with the 296 jobs being created for the 10,000 tons of used electronics being reused when it comes to the carbon footprint? 296 people driving to work, compared to one landfill operator, plus the transportation costs of the 10,000 tons of used electronic waste seems to be a much greater environmental impact.

**PAGE 118 8.1.7 (B) LEGISLATIVE RECOMMENDATIONS “REQUIRE PAYT/SMART”**

Has there been any thought on how this would be structured so it would be workable in all communities, for instance NYC vs St. Lawrence County?

**Page 119** – The State had previously been evaluating a number of simulation computer programs to model the effect of a number of program changes. Has the State undertaken modeling of the changes proposed in the “Beyond Waste” Plan on the urban, suburban, rural areas or on discrete or unique areas of the state; i.e. Adirondacks, Long Island, Southern Tier, NYC?

**P. 124 (8.3)** – “Industries that replace virgin feedstocks with recycled materials pay less for the raw materials” This statement needs to be supported with data to justify it.

**Page 125** – Will the State advocate for the elimination of Federal natural resource subsidies or enact a State Fee/Tax to balance the playing field between natural resources and recycled/reused resources?

**P. 128 (8.3.1)** -“Given this effort, DEC now believes that the actual facility-reported data is the best available and is more representative of the reality of materials management in New York State. It is important to note that some recyclables are sent directly out of state, and many recycling facilities (e.g., scrap metal yards, recycled paper manufacturers, etc.) are not required to report to DEC, so the recycling figures may be understated. However, much of this material is likely to be reported by either transfer stations or recycling facilities.”

Please verify that this material is “likely to be reported by either transfer stations or recycling facilities” – As DEC does not require this material to be reported, yet it then states that figures are understated, but then says it is reported to validate that NY’s recycling numbers are too low! This argument seems to go around in a circle.

**Page 129** – The State could consider an RFP for a waste management software system that can manage scales, online data capture and reporting and then mandate that both public and private SWMF’s purchase this package off NYS Contract, or better yet, provide it free to all SWMF’s. This would allow for the standardization of what each waste material is called and how it is counted for consistency of record keeping and reporting.

**Page 130** – The Plan has missed the point, as even with competing priorities and limited resources, most municipalities have been more supportive of funding or expanding programs for waste diversion and recycling efforts than that of the private sector whose focus has historically been limited to profitable waste diversion/recycling efforts. With so much of our solid waste management systems controlled by the private sector, municipalities can only have so much influence on what happens to these materials.

**Page 132, 8.3.3** – Please have the Plan explain the dollar value of the returns and how this money is used in the state since it is not going for recycling programs or grants.

**Page 132** – We have seen a significant reduction in the ability of educators to include materials management/waste reduction/recycling/ disposal, and composting in their class curriculum. They are not being given the resources or class time to include what they term “enrichment” programs. If we don’t reach the youth with this message, it will be even more difficult when they become adults. Also, the loss

of waste program staff dedicated to education and information services has severely restricted what local programs can do to educate and advocate for these programs.

**Page 133 (8.3.5) - Education:** With or without incentive programs, communities that have dedicated resources for outreach and education experience greater recycling success. The public must be continually made aware of the many reasons why recycling is important: to reduce both the environmental and financial costs of waste disposal, combat global warming, reduce pollution from the extraction and manufacture of virgin materials and to comply with the law. They also must be reminded regularly about what materials are collected and how, and they must believe that their materials are actually recycled, not mixed with garbage and disposed of. It is not possible to overstate the importance of employing dedicated recycling coordinators for this type of effort. As evidence, regions in which DEC has a strong recycling outreach presence or, more important, in which planning units have recycling outreach staff, experience better recycling performance than those without dedicated staff.

Will the state dedicate funding for recycling coordinators? Is the state aware that many recycling coordinators were dropped from local budgets when state funding ended?

**P. 134 (8.3.5) – enforcement –** this section needs to be better addressed. Generally, it is accurate that where enforcement is undertaken, better recycling rates are achieved. If it is to be a Plan goal to better enforce recycling mandates, then this needs to be addressed and funded at the state level.

**Page 134 –** Several of the initiatives in this section (PAYT, recycling prices, and franchise collection districts) require local legal support and some local legal staff have questioned the legality of the local municipalities implementing these programs. It might be a good local tool if the State AG could develop guidance or model legislation that could be provided to local government officials to assist in this effort.

**Page 137 (8.3.6) –** This section of the Plan discusses single stream recycling low residue rates, yet in presentations at conferences, discussion is about lower quality and higher residue rates. Later in the section, the Plan reports poor quality and high residue – which is correct?

**Page 138 (8.3.6) –** Converting to semi-auto collection is very expensive to initiate and many local government programs are too small for this capital investment.

**PAGE 138 8.3.6 (D) RECYCLING AND FOOD SCRAPS COLLECTIONS** Is the data referenced as 53 (making recycling work) based on factual information or based on a report of a round table discussion? Is the DEC using round table discussion material as fact and a basis for statewide planning goals, and later for facility permit conditions? Please clarify (and correct if necessary).

**PAGE 140 8.3.9 C&D RECYCLING** This section discusses the potentials of recycling of C&D. Are there actually viable markets for the various components of C&D? If so what are they? Where are they located and what are some of the commodity prices? Has the DEC considered classifying C&D as a solid waste or eliminating the BUD for ADC in order to create a financial incentive for the recycling of C&D?

**PAGE 140 8.3.10 RECYCLING MARKETS** This chapter discusses the volatility of markets and recommends “responsible government budgeting”. What is the definition of “responsible budgeting”? The Plan fails to provide an economic analysis to support this Plan. How can municipalities budget for a Plan that provides no meaningful cost analysis? For instance, what is the cost of sorting out and marketing of scrap sheet rock? How does location and population affect these costs? The Plan suggests 10 to 20 year contracts for processing/selling of recyclables. Please provide examples of contracts for recyclables of that duration and that include a floor price. Are there any processors in

NYS that have been able to stay in business for that long? How will companies survive when their cost exceeds the floor price of any contract, for an extended period of time?

The comments in this section of the Plan are very troubling and reflect a complete lack of real world experience with marketing recyclables. The plain fact of the matter is, no contract, no matter how it is written or for what term it is set, can force a private company to lose money. DEC must recognize that the State's recycling mandate is a direct cost to the local governments---some years it is a high cost when markets are down, and other years it's a low cost when markets are good, and in still other years local governments can't move recyclables at all because the private manufacturers, where all recyclables go, are not manufacturing. Recycling is a valid goal, but it is a cost to local governments and it's time that this was acknowledged.

Local municipalities have attempted to budget responsibly and include state funding, as promised, in their budget projections. However, most state funding for recycling projects lag years behind the actual expenditures and becomes difficult to justify to elected officials. For a truly viable recycling program, state funds need to be available in months, not years.

In order to recycle some of the materials that do not currently have markets the Plan is suggesting that markets will be developed. How, by whom, and when? Without markets and without a timetable for development of markets, how are local municipalities going to develop plans for the recycling of these materials?

What does the Plan propose happens to separated materials when there are no markets? How long is it realistic to expect a municipality to store wastes that are currently unmarketable? Will the State provide long term storage?

**Page 140, 8.3.9 - C & D** – State that over half is recovered in NYS. What data supports this and what numbers are included or are these numbers being misreported? The Plan needs to address the problems that exist with C & D recycling such as lumber reclassification for certifying structural building requirements. Also paints, stains, etc. along with asbestos/lead issues in deconstruction.

**P. 141 (8.3.10)** –There are problems with long-term markets. This in and of itself limits a planning unit's ability to obtain the best prices when markets fluctuate, by being tied down to a long term agreement. It is a fallacy that long term markets will guarantee floor prices during an economic downturn. A contract can be broken by either party if the market swings are creating financial hardship. Often times when markets fall, the supplier simply discontinues providing service (pick up). This Plan does not take into account the distance to markets, in that a planning unit cannot travel to a distant market economically.

**Page 143 (8.2.12)** – Product Stewardship has a place for hazardous type materials. To think it is going to solve many waste problems is simply unrealistic. Mandates are not needed and outlets for items need to be developed.

**PAGE 143 8.3.12 PRODUCT AND PACKAGING STEWARDSHIP** *“instead of requiring local governments to fund collection and recovery programs”*

This sentence seems to indicate that local governments will be required to fund collection and recovery programs for product stewardship items. Is it the intent to burden local government with the cost of these as yet undefined programs, many of which do not have markets? Where municipalities are already collecting and managing materials this is a realistic expectation, but many materials in PS programs are not currently managed.

**Page 145, 8.3.13** Long term markets are not always reliable. It is not clear that the Plan truly understands how volatile markets actually are. Different municipalities have different financial capabilities, different levels of political support and different access to markets which all make reliability an issue.

**PAGE 145 8.3.14 (A) PROGRAMMATIC RECOMMENDATIONS:** Recommendations include: creation and expansion of markets; development of regional processing facilities; state funding of recycling programs etc. Can municipalities make their local Plans contingent on the state succeeding in these efforts?

**Page 146** – Mandate that local government, state government, DOT and the Thruway Authority use 10% rubber or glass amended asphalt (with a set minimum % content rubber or glass) annually by 2012, 15% by 2015 and 25% by 2020 to provide stable and consistent rubber and glass markets for difficult to manage materials.

**Page 146** – How will the State assure the development of alternative materials handling facilities for all of the materials being diverted from the landfills within all of the regions of the state before the materials are required to be diverted? Will the State promote the acceptance of separated recyclable/waste materials in a WTE facility or landfill if it is determined to be more environmentally sound than trucking them long distance to recycling/reuse facilities?

**PAGE 147 8.3.14 (B) REGULATORY RECOMMENDATIONS** “*PROPOSES RESTRICTIONS ON DISPOSAL FOR SOURCE SEPARATED MATERIALS*”

What is actually going to be proposed here? Would there be criteria for allowing source separated materials to be disposed of when markets collapse? Materials can build up beyond the capacity to store very quickly, there must be a mechanism to provide relief in such a situation.

**PAGE 147 8.3.14 (C) LEGISLATIVE RECOMMENDATIONS** The suggestions to revise the solid waste management act must include funding by the state of those mandates. Have any cost estimate been developed to accompany the funding requirements for this type of legislative action?

**PAGE 148 8.4 COMPOSTING AND ORGANIC MATERIALS RECYCLING** The Plan needs to provide calculations showing how these numbers are generated. All referenced data shows combustion on an equal footing with composting as it relates to greenhouse gas generation, therefore factors are incorporated that are not shown in order to arrive at a different result. Reduction in GHG greater than 100% is not possible, 100% reduction would bring emissions down to zero. Is this section implying that composting actually absorbs GHG?

Table 4.1 indicates a 10% benefit in GHG reduction for food waste vs. combustion (0.2 vs. 0.18 tons of CO<sub>2</sub>e/ton; or a difference of 40 lbs of emissions per ton of food waste composted. How can the elimination of 50% of the food waste from a waste to energy facility have a 10% reduction in the GHG emissions of the waste management system of the entire community? This must be explained in detail in order to be credible.

Statement: “*EVEN IF RECYCLED MATERIALS HAVE TO BE TRANSPORTED 370 MILES THERE WOULD BE A GHG REDUCTION*” according to the Plan, this statement applies to the composting process itself, not when compared to landfilling or WTE. What was it actually compared to? There must have been an assumption on GHG generation when the materials are not composted. What are the assumed transportation conditions? Statements like this are highly suggestive and misleading and have no place in a Plan that should be based on solid data and science.

Table 4.1 indicates that MWC combustion of food waste reduces GHG generation by 40 lbs of CO<sub>2</sub>e/ton less, when compared to composting. However it also indicates that MWC of yard waste reduces generation of GHG by an extra 60 lbs of CO<sub>2</sub>e/ton (a 15% improvement over composting). This seems to conclude that combustion of yard (wood) waste is beneficial vs. composting? Based on this, The Plan should propose lifting the ban on combustion of yard waste.

**Page 149** –The issue of co-composting isn't does the process work, it is how to site them in close proximity to the source of generation of large quantities of organics and how to reduce the cost of the operations to be competitive. These plants aren't always the best neighbors due to the nature of the materials they are managing and locating them in population centers is problematic.

**Page 149 (8.4)** – The Plan mentions methane generation of compost within days. How is this being captured in a compost facility? Very few if any have gas collection systems. Also, the Plan should acknowledge other compost programs that have been shut down due to odor issues like the one in Fort Plain, NY.

Are there any calculations showing the processing of compost equipment/vehicles/windrow turning/grinding and transporting in the GHG claims? Please show where these numbers are from.

**Page 150 (8.4.1)** – Here, the Plan states that pathogens, heavy metals and pesticide/herbicide residual are formed in compost facilities, yet many do not have the environmental controls that both landfills and WTE facilities include. Compost facilities are being exempt from many rules and regulations without a clear determination on the impact on ground water, air quality, etc. Many compost facilities are unlined and leachate could be allowed to be discharged.

**PAGE 150 8.4.1 ORGANIC RECYCLING TECHNOLOGIES AND METHODS** *“THIS IS A DYNAMIC AREA OF WASTE MANAGEMENT, NEW TECHNOLOGIES FOR ORGANICS RECYCLING AND METHODS AVAILABLE WILL LIKELY SURFACE IN THE COMING YEARS, EACH POSING ENVIRONMENTAL CONCERNS THAT MUST BE ADDRESSED PRIOR TO PLANNING FOR THEIR USE”*

Since the Plan sets a goal of 90% recycling by 2018, how likely is it that the technology needed will surface, be thoroughly tested, proven to be environmentally sound and be cost effective so that planning units may utilize them to meet the Plan's goals? Will DEC lead in the identification of technologies and rulemaking for these technologies, so that local communities do not need to do the R&D for these surfacing technologies? Will DEC consider building and operating regional facilities in order to expedite the implementation of these technologies?

The GEIS states: “there are no anticipated significant adverse environmental impacts from adopting and implementing the Plan”, what is DEC's position in regards to addressing the “environmental concerns” mentioned in this section? ECL Title 1, 27-103(d) requires DEC to address these issues in the Plan.

**PAGE 150 8.4.1 (B) ANAEROBIC DIGESTION (BIOGAS)** Creation of “biogas” is listed as an advantage for anaerobic digestion. Isn't biogas methane, CO<sub>2</sub> and HS, and a GHG and should this not be listed as a disadvantage? Biogas generated in a landfill is bad according to the Plan, as is CO<sub>2</sub> generated as a byproduct of MWC and/or LF gas to energy plants. Both methane, (or an equivalent), and CO<sub>2</sub> are present in “biogas”. DEC needs to address biogas properly in the context of GHG generators and be consistent in when and how it is bad.

Reference 60 refers to the MA solid waste master plan which references the EU's 90 operating AD facilities and the alleged construction and operating costs. However, the EU mandated that organics land

filled must be limited to 25% of the level of 1996, by 2012. While still an ambitious goal, non-the-less more realistic than this Plan. Also it must be taken into consideration that in the EU average landfill tipping fees are \$100/ton and WTE fees are up to \$150/ton. The MA report also references an AD facility in Brecht (Belgium). This is a 55,000 TPY facility, the facility description makes mention of a waste water treatment facility and notes that MSW treatment (separation) on the front end is now favored over curbside separation. No cost data is provided. To be credible, the Plan must provide an in-depth analysis of the whole spectrum of AD, including the funding issues when landfill tipping fees on average are one third of those in the communities where AD is utilized.

Reference is also made to the City of Toronto's "success" with AD. However reference "*Biocycle* September 2008, vol. 49, no. 9, p. 44" this article quotes City of Toronto solid waste officials as follows: "experience to date with contracted processing capacity teaches that disruptions and failures are common, and that the facilities are often unable to respond with adequate contingency measures." And "This has led the City to sign a number of short-term SSO management contracts, which staff feels "is not sustainable in the long-term." The article provides anticipated costs as follows: "estimated capital costs for the two new primary processing facilities for SSO is about \$69 million (cdn), equivalent to \$54/metric ton. Estimated operating costs for the two plants is about \$10 million/year (cdn), or about \$91/metric ton, which includes estimated revenue from electricity sales of \$23/metric ton." One can only conclude that DEC did not investigate the costs and operating issues of AD adequately. Clearly a comprehensive analysis including feasibility and environmental impact needs to be performed by the state for use by local municipalities, before any recommendation for this technology can be considered. The cost data provided here, indicating a cost of \$145/ton will be a major stumbling block in regards to getting this technology implemented.

Additionally this section refers to the potential for energy generation, however there is no mention that the AD facility in Toronto has no energy recovery due to the expense of the system (gasses are flared). Also the Plan refers to the expense of hooking up LFG to Energy facilities to the grid several times most notably in section 9.4.7 "*Energy generation from landfill gas is limited by the substantial costs to facilities, as well as logistical and regulatory hurdles related to connecting landfill energy recovery facilities to the electric grid*" Since energy recovery facilities from AD systems will be similar or smaller in size will they not face the same "substantial" costs?

**Page 156 (8.4.3)** – This section states that organic collection is effective and cost competitive, yet there is no standard method for collection and the only reference is a single article in *Biocycle* Magazine. This technology needs to be addressed and actual experience documented in order to include it in the Plan.

**Page 157 (8.4.4)** – This section appears unclear. On one hand, it states that wood chips are in high demand and it's becoming difficult to get this material, yet the Plan also states it's imperative to develop renewable energy. Isn't wood a virgin material? Don't we need trees to help reduce the carbon footprint?

**PAGE 157 8.4.5 FINDINGS** "ORGANICS COMPRISE 30 PERCENT OF THE MSW IN NYS" This number should not be listed as a finding since it is an estimate based on incomplete data and national averages (see section 8.4.1) Also % of organics vary by planning unit, due to the vast diversity among NYS planning units. DEC needs to do a better assessment of the variations among the planning units and should not be using such broad estimates in its findings.

**Page 159 (8.4.6)** – Require planning units to evaluate the organic portion of their waste stream in LSWMP's will cost money that planning units don't have available. The State should do that evaluation and provide it to the planning units as part of an overall technology assessment and waste characterization study.

**PAGE 159 8.4.6 (B) REGULATORY RECOMMENDATIONS** DEC needs to consider lifting the ban on yard waste from WTE facilities since there is a 15% GHG benefit when combusting yard waste rather than composting.

**PAGE 160 8.4.6 (C) LEGISLATIVE RECOMMENDATIONS** Mandating of any category of recyclable is not good policy and certainly food waste can be problematic to recycle. The term “sufficient infrastructure” is highly suggestive and most likely cannot be defined. What is deemed sufficient today may not be adequate in the future. Will DEC ensure that legislation provides for state funding in order for communities to be able to comply with any organic waste requirements? Will the state subsidize mandated recyclables in order to maintain markets? The term “cost effectively” must be defined. Does this imply, say, as compared to the cost of landfilling?

**Page 170 (9)** – Shouldn’t we strive to improve the other existing recycling products and methods before adding new ones?! Here in this section, the Plan actually states there will “still be residual requiring disposal”.

**Page 175 9.3.1 ENERGY GENERATION** DEC draws comparisons with energy generation/conservation between recycling, land filling and MWC. The theme throughout the Plan has been to leave Anaerobic Digestion out of these comparisons. In order to make a complete assessment of the benefits of all technologies, AD should be included in these type of statements. DEC needs to evaluate the benefits, both financially and environmentally of implementing comprehensive organic recycling programs, when a community already operates a WTE facility or a landfill with Gas collection and utilization.

**Page 177 (9.3)** – Shouldn’t the Plan evaluate a preference for landfills with gas to electric facilities? Also, what about bioreactor-type landfills that are now being run that have all the environmental controls built in that compost facilities do not?

**Page 181 (9.3.1)** – The study reference comparing MWC and landfill gas to energy is from one source, Environmental Science & Tech. There should be much more research done and reported on before this conclusion should be used as a basis for the goals established in this Plan.

**Page 181 9.3.2 COMPATIBILITY WITH RECYCLING** The Plan references the recycling rate for Onondaga County at 51%. Onondaga lists their planning unit’s recycling rate at 64%. As has been the case with data presented throughout the Plan DEC appears to have manipulated the data submitted by OCRRA. If all communities had guidelines and resources to compile data to show recycling rates for all sectors of the community, there might be many planning units with similar results. Had the DEC spent more effort in compiling data for this Plan, then the recycling rate, for the state as a whole, would have been much higher than what is estimated and reported in the Plan. The state needs to develop reporting mechanisms, with municipal, commercial, institutional and industrial entities and make reporting mandatory in order to obtain meaningful data, before drawing conclusion on waste generation, reduction and recycling rates.

**Page 182 (9.3.2)** ---To remain competitive, many landfills have to compete for waste against private sector facilities, while maintaining the level of service and recycling programs that are being offered. Private facility owners/operators have not typically been providing the same level of services, since the cost is usually prohibitive and they aren’t a local government under the same requirements.

**Page 187 (9.4)** – The state needs to ensure that their alternatives for landfilling are held to the same standards as stated. Why aren’t the same controls being set for compost odor controls, for efficiency, groundwater monitoring with liner system and litter control, that landfills are held to? Local

Governments have made the capital investment for environmental safeguards, yet often times the alternatives are either exempt, or little data is provided to show that they are on equal levels of environmental control.

**PAGE 203 9.4.7 LANDFILL GAS** Reference 72 (Crawford and Smith, 1985) has apparently been used to compile this section of the Plan. This document is 25 years old. In the past 25 years much has changed in the composition and management of solid waste. The Agency for Toxic Substance and Disease Registry uses this same report by Crawford and Smith for a “Landfill Gas Primer” with the following disclaimer: *“Historical Document: This document is provided by the Agency for Toxic Substances and Disease Registry (ATSDR) ONLY as an historical reference for the public health community. It is no longer being maintained and the data it contains may no longer be current and/or accurate.”*

Why does the DEC use 25 year old data that is no longer updated and may no longer be accurate?

**Page 203** – As landfill GHG emissions are 4% of the States inventory and it has been widely reported that the landfill GHG emissions are the only segment of GHG Sources that have shown a significant reduction over the past 10 years due to the industries voluntary investment in improved collection and use programs, what would be the effect of the expansion of these incentives (REC’s, Tax Credits, Carbon Credits, Green Energy Production Credits, etc.) for the LFG system verses the expense of the Plan’s initiatives to reduce the quantity of organics going into landfills?

**Page 210** – Has the State considered the environmental value of promoting reclamation of the recoverable materials that have historically been landfilled? If there was an incentive to exhume the old wastes and divert them for energy recovery and materials reuse (metals, soil) and then reclaim the landfill capacity for non-putrescible waste/ash disposal, this could effectively eliminate the long term landfill GHG emission issues.

**PAGE 212 9.5 IMPORT/EXPORT FOR DISPOSAL** This section preaches to the irresponsible practice of waste exports. All exported MSW, as shown in Figure 9.25 and as stated in section 9.5.1, is from the greater NYC/Long Island area. Increasing recycling, composting, and organics digestion, to free up more capacity upstate will not make any difference to this statistic. The “potential” of the Plan is based on markets that do not currently exist, and in many cases, technology that has not been proven. “Beyond Waste” is a long term Plan and it is incumbent on DEC to spell out what it expects from major waste exporters as a long term strategy since just shipping waste to distant out of state landfills is unsustainable at best, and environmentally irresponsible at worst.

The “Plan” is silent on how it envisions major municipal centers to accomplish reduction/recycling of 5.4 million tons of MSW by 2018. These areas do not possess any permits for any disposal facility nor are there plans to construct disposal facilities. How does DEC envision compliance with the Plan’s goals in these circumstances?

**PAGE 218 9.5.4 DATA COLLECTION AND REPORTING** As is the theme throughout the Plan accurate data is missing and the Plan relies on assumptions and estimates, mixed with some “unreliable” reports. The first and foremost priority of the state must be to gather reliable and consistent data. Without proper data the Plan cannot be taken seriously and certainly cannot be applied to all planning units equally as is presumed by the statements in sections 3.8 and 3.9. Does DEC have a plan on implementing consistent data collection and administration of the information, other than stating improvements are needed?

**PAGE 219 9.6 EMERGING TECHNOLOGIES** Reference is made to a NYC study referring to the *“potential better environmental performance of thermal technologies and anaerobic digestion than MWC”* The Plan is full of unsubstantiated statements to this effect. There must be a comprehensive

analysis with scientific and field data in order to provide the public with true comparisons, environmentally as well as economically, on these “superior” environmental technologies? The cost of these technologies being comparable to the cost of export applies only to certain areas of NYS. How does the cost compare to private facility tip fees of \$30 -\$35 per ton?

Reference 76: “South Coast Air Quality Management District” is there any specific document this reference points to? None is provided.

**P. 219 (9.6)** – Emerging Technologies - What is the purpose of this section?

**PAGE 222 10.1.1 UPDATED SOLID WASTE MANAGEMENT ACT** *Page 222 1 “Set new goals and define metrics”* This section appears to put the cart before the horse. It states that new metrics are needed and should be implemented, yet goals cannot be measured until metrics are in place and actual useful data is generated. How can planning units establish reduction rates, when it is unknown what is to be included in the data? In one instance DEC determined export numbers to be 1.5 million tons (25%) higher than what is reported by exporters.

How can the legislature pass a law on waste reduction rates when markets are not available and technology is only in the development stages? DEC has steadfastly ignored economic and environmental impacts associated with the implementation of the Plan. Throughout this Plan DEC has made assumptions on waste quantities and composition. Will DEC provide proper analysis of what costs and impacts are for these proposals before forging ahead recommending legislation for costly and arguably unproven technologies and recycling to markets that do not exist? If not, then this Plan should not be issued until such studies can be done, and appropriate markets are developed.

**Page 223 #6** DEC must include a funding mechanism to make up the difference between a planning unit’s cost to recycle and what the “market” will pay for the product. This will be the only way that planning units will be able to afford to continue to recycle when costs exceed revenue. The Plan continues to ignore that the current funding mechanism for recycling programs (through tipping fees) will be eliminated when the Plan is implemented as projected.

**Page 223** – The Plan should lay out the specific criteria that the DEC staff will use to implement these new initiatives and assure that there is adequate financial and public support for these efforts before mandating programmatic permit special conditions.

**Page 224** – The use of disposal bans by a state have not been effective to gain increased waste reduction or recycling rates, but have been an effective tool in exporting the problem to surrounding states, or to increase the amount of illegal dumping. (Mass’s C&D waste ban).

**Page 224 #8** DEC should not force quotas on recycling through facility permit conditions. Item 7, increasing DEC authority to enforce recycling requirements at generators should suffice.

**Page 224 #10** Legislating PAYT unilaterally is bad public policy. Not all communities are alike, and PAYT will have a negative effect on disposal practices. Illegal dumping, backyard burning and disposal will result in rural communities when costs to properly dispose escalate.

**PAGE 227 10.1.3 REVENUE GENERATING PROGRAMS** In order for DEC to provide any meaningful revenue generating proposal an estimate must be provided on the cost of implementing this Plan. These costs will amount to billions, not millions for NYS. For instance the Plan suggests that anaerobic digestion is the answer for organics that cannot be composted. Optimistically this would only

be for 1.6 million tons of material. At \$145/ton (see Toronto AD) the cost for AD would be \$232 million per year or \$2.32 billion over 10 years. It is critical that DEC develop a financial analysis of the implementation of the Plan in order to provide an estimate on the magnitude of the tax increase required to fund the proposed programs and facilities.

The EPF contribution to solid waste and recycling programs has not amounted to any significant contributions and is years behind in funding of recycling program expenditures. This fund continues to be a target of the legislature and Governor for supplementing the state general fund, as was proven by the enactment of the recent e-waste legislation. Raising taxes through tipping fees and permit fees will only increase the tax burden on the local level and certainly should be opposed if 100% of these monies do not flow back or stay in the planning unit. Section 10.1.1(7) mentions increasing DEC resources for additional enforcement. Is it the DEC's intent to use the revenues listed in this section (10.1.3) to fund additional staff? If so, how much funding does DEC envision for additional staff to implement the Plan?

**Page 229 10.3.1 PROGRAMMATIC RECOMMENDATIONS** *“The state’s ability to implement these initiatives and achieve the goals of this Plan will depend on its ability to increase available staff and financial resources”*

This statement says it all and applies to planning units as well as the state. It is ironic that the state applies this caveat to itself but not to planning units. DEC blatantly suggests elimination of economic considerations for implementation of source separation/recycling programs and forcing planning units into compliance with permit conditions regardless of economic hardship within the planning unit. The Plan needs to clearly identify what the costs are of implementation of the Plan and what revenue sources will be tapped to offset these expenditures. This financial analysis should be actual dollar amounts rather than in general terms identifying vague sources of taxation.

**Page 229** – The State’s initiative to develop or expand their solid waste management capabilities to achieve the goals outlined in the “Beyond Waste” Plan should provide additional capacity for surrounding planning units to access these programs and not have to have the extra expense of each planning unit developing all of the new infrastructure that will be needed for state wide program implementation. For example, if a local State prison/college is developing a co-composting program, include capacity at the co-composting facility to accept organic wastes from the surrounding planning units.

**Page 231** – Change the funding criteria for ESD-DEC-NYSERDA-NYPA etc. to allow the agencies to combine efforts and increase funding to reward progressive programs over mediocre programs.

**Page 232** – GHG control is the environmental “soup du jour” but this will likely be supplanted in the public’s mind with the next imminent environmental threat over the coming decade. To primarily base/justify our Plan improvements on a single hot current issue will destine the Plan to fall short when the public’s interest/concern turns to another issue. For the Plan to have a sustainable message for the future, it must be based upon the science of what is best for our public and environment in the long run in the context of all of the environmental or public health threats.

**Page 235** – Given the length of time it takes to develop new materials management capacity, to re-educate the public regarding the need to change our current purchasing and waste/recycling/reduction practices and for DEC to complete the major revisions required under the Plan, the implementation Plan will likely take 10-15 years longer than identified. While it is important to start now or it will only delay our implementing these changes and getting to a more sustainable future, the Plan needs to be more realistic in its timelines.

**Page 236** – To include the statement “support goal to reduce statewide waste disposal by 15 % every two years” is not supported by the data or discussion of the alternatives presented in the Plan. Also the

statement is vague and open to misinterpretation. This could be read to mean that the Plan is advocating waste exportation to preserve our in-state waste disposal capacity. Also, the Plan could be interpreted to advocating the development of additional WTE capacity to obtain the 75% weight and 90% volume reduction that WTE can provide.

**Appendix:**

WARM does not account for the value of electricity generation from landfill gas recovery and or waste-to-energy facilities.

Appendix 5. 1, first page, please remove NYSASWM logo and replace with NYPSC logo.

Appendix 5. 1 page 2 of 2 – put in new NYSASWM website - [www.nysaswm.org](http://www.nysaswm.org).

P. 64 appendix, 6.2.5 Rates attained when projects were completed are **assumed** to be recurring.

Because of staffing and resource shortages, ESU has never implemented a process to verify that the economic benefits attained at project completion have continued, been exceeded or have lapsed years later. Either verify the existence of the businesses and their use of materials, or remove the reference.

Appendix 7.1 Shows a manure composting site in Fulton County. The website is inoperable and there is no manure composting site in Fulton County according to Cornell Cooperative Extension of Fulton County. It is actually believed to be Van Alstyne's in Montgomery County.

P. 76, Appendix 7.2 Of the 993 VDFs (Vehicle Dismantlers) currently listed in the Solid Waste Information Management System (SWIMS) database, 548 facilities (55 percent) submitted annual reports. If the state can't get responses from these businesses, how can local planning units?

P. 81 The Reuse category is likely underestimated since the response rate from tire re-treaders was low.