The University of Maine
DigitalCommons@UMaine

Honors College

Spring 2015

An Analysis of the Maine Solid Waste Management Hierarchy and Recommendation For Future Implementation

Jaime Steven University of Maine - Main, jamie.steven@maine.edu

Follow this and additional works at: https://digitalcommons.library.umaine.edu/honors

Part of the Economics Commons, and the Environmental Sciences Commons

Recommended Citation

Steven, Jaime, "An Analysis of the Maine Solid Waste Management Hierarchy and Recommendation For Future Implementation" (2015). *Honors College*. 228. https://digitalcommons.library.umaine.edu/honors/228

This Honors Thesis is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in Honors College by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.

AN ANALYSIS OF THE MAINE SOLID WASTE MANAGEMENT HIERARCHY AND RECOMMENDATION FOR FUTURE IMPLMENTATION

by

Jamie Steven

A Thesis Submitted in Partial Fulfillment of the Requirements for a Degree with Honors (Economics, Ecology and Environmental Science)

The Honors College

University of Maine

May 2015

Advisory Committee:

Aram JK Calhoun, Professor of Wetland Ecology, Department of Wildlife, Fisheries, and Conservation Biology, Advisor George K. Criner, Ph.D., Director School of Economics Caroline Noblet, Ph.D., Assistant Professor School of Economics, Associate Senator George J. Mitchell Center Sharon S. Tisher, J. D., School of Economics and Honors College Roger Huber, J.D., Environmental Lawyer at Farrell, Rosenblatt & Russell

Abstract

The current Solid Waste Management Hierarchy does not adequately deter land disposal of waste in Maine. In this paper, I analyze the Maine State Solid Waste Management Hierarchy as it reads in Title 38 M.R.S.A. § 2101, found in Appendix B. The purpose of this paper is to address the hierarchy's issues, as well as to offer additions to the hierarchy that will help in its goal of reducing solid waste landfilled. In this paper I analyze the original intentions of the hierarchy when it was enacted, and addresses the faults within the hierarchy that do not aid these intentions in their realization. Utilizing both a recent case involving the Municipal Review Committee's desire for a new landfill in the State of Maine as well as survey results pertaining to current state municipal solid waste policies, the failure of the hierarchy to call for adherence is demonstrated. In this paper I recommend a framework that the government should utilize to (a) construct a "landfill tax" to implement as part of the hierarchy, (b) create a landfill credit system to incentivize landfill operators to implement extra diversion efforts, and (c) utilize the funds gathered from the landfill tax to give aid to municipalities to strengthen their local recycling and diversion efforts. This recommendation is only the very first step in the process of enacting change, and the paper identifies some of the next actions that would need to occur.

Background

This past summer I interned with Roger Huber, the environmental lawyer at a Bangor law firm Farrell, Rosenblatt & Russell. My main work as an intern for this firm was analyzing the Municipal Review Committee's application for Public Benefit Determination to the Department of Environmental Protection to build a new secure landfill in one of two towns in Maine, either Argyle or Greenbush. Farrell, Rosenblatt & Russell represented the town of Greenbush, Maine, and was requested by this client to write comments pertaining to the Municipal Review Committee's application for Public Benefit Determination; specifically, comments outlining why the Municipal Review Committee did not qualify for this requested Public Benefit Determination, based on the standards of determination presented in M.R.S.A. §1310-AA. Working as an intern I did much of the research for these comments, and it is through researching this case that my interest in solid waste disposal in the state of Maine sparked. I decided to do my thesis pertaining to the topic. Through my summer internship I learned in detail about all of the statutes relevant to solid waste disposal in Maine. However, I was interested by one in particular: Title 38 M.R.S.A. § 2101- the Solid Waste Disposal Hierarchy. Through research I learned that this hierarchy, while its notions are commendable, is not having the effect on the solid waste disposal habits of the state of Maine that it was intended to. It is for this reason that I chose to delve into this important issue as my Honors thesis.

Table of Contents

Background	iii
Maine State Solid Waste Management Hierarchy	1
The Maine State Solid Waste Management Hierarchy Intentions	4
The Maine State Solid Waste Management Hierarchy Reality	6
Recent Developments	6
The Maine Solid Waste Management Hierarchy Inadequacies	10
The Municipal Review Committee's Application for a Public Benefit	
Determination	10
Municipal Solid Waste Policy Survey	15
Time Line of Maine State Solid Waste Disposal Developments	16
Addressing the Issues Within the Hierarchy	17
The United Kingdom "Excise Notice LFT1: a general guide to Landfill Tax".	18
The Implementation of a Landfill Tax for the State of Maine	20
Discussion	25
References	30
Appendix A	33
Appendix B	47
Appendix C	49
Appendix D	51
Appendix E	55
Author's Biography	58

Maine State Solid Waste Management Hierarchy

The State of Maine's solid waste disposal system is unsound because the Maine

statute Title 38 M.R.S.A. § 2101, the Maine state solid waste management hierarchy,

presents only *ideals* for implementation rather than *expectations*, due to a lack of means

to enforce the statute as a requirement, as well as a lack of means to actively provide

disincentives for ground disposal of waste. In order to delve into why this disconnect

exists, it is first necessary to understand the current solid waste management hierarchy as

it is stated and implemented today. The hierarchy as written in Maine State law follows:

Title 38 M.R.S.A. § 2101. Solid waste management hierarchy

- 1. Priorities. It is the policy of the State to plan for and implement an integrated approach to solid waste management for solid waste generated in this State and solid waste imported into this State, which must be based on the following order of priority:
 - A. Reduction of waste generated at the source, including both amount and toxicity of the waste;
 - B. Reuse of waste;
 - C. Recycling of waste;
 - D. Composting of biodegradable waste;
 - E. Waste processing that reduces the volume of waste needing land disposal, including incineration; and
 - F. Land disposal of waste.

It is the policy of the State to use the order of priority in this subsection as a guiding principle in making decisions related to solid waste management.

2. Waste reduction and diversion. It is the policy of the state to actively promote and encourage waste reduction measures from all sources and maximize waste diversion efforts by encouraging new and expanded uses of solid waste generated in this state as a resource.

The solid waste management hierarchy was first enacted in May of 1989, and was

established by the state as a policy to promote solid waste management efforts in the

following order of priority: reduction; reuse; recycling; composting; waste processing that reduces volume; and land disposal (Solid Waste Management Hierarchy). A discussion of what each of these steps means follows.

The first priority is to create a reduction of waste that is generated at the source. Reduction of waste at the source is something that mainly falls on the individual in their household or business, as it is not something that can be easily monitored through government intervention. The fundamental concept behind "reduction" is that one should limit the number of purchases they make in the first place. Reduction of waste at the source can happen through other outlets as well, such as using reusable shopping bags. If individual actions were to occur in all households around the state, the tonnage of waste intended for disposal would be reduced immediately, which would ultimately result in lower disposal costs for towns, as well as less landfilled material (Reduce, Reuse, Recycle).

As entire reduction is impractical and impossible, the next responsible step promoted by the hierarchy is for individuals to *reuse* materials. The "reuse" priority is still focused mainly on the individual level, and the concept is simple yet effective: reusing items that have been purchased, instead of buying new ones. This can be done in numerous ways such as reusing plastic water bottles, plastic bags, or jars and containers.

The third priority of the solid waste management hierarchy is "promotion of recycling". Individuals may recycle especially if there are town or state supported recycling facilities and recycling outlets at transfer stations. While it is true that recycling requires a component of collection and processing that has not yet been required at the

other levels of the hierarchy, in order for recycling to be effective a certain degree of organization and processing is required. However, recycling generally saves electricity and reduces landfill expenses (Waste Management Options).

The next priority stated in the hierarchy, is "composting of biodegradable waste." Composting can be done on an individual level in one's own back yard, or it can be done on a town level by having transfer stations that provide areas for residents to bring their compostable material. Composting is as simple as separating the organic material found in waste and using it to yield nutrient rich soil. Through effective composting a town can significantly reduce the amount of waste that makes it to the disposal stage.

The second to last priority listed within the hierarchy is the utilization of "Wasteto-Energy Facilities." At Waste-to-Energy facilities (WTE's), waste is converted into useable heat, electricity or fuel through a variety of different processes such as combustion, gasification, anaerobic digestion, and landfill gas recovery. WTE facilities are prioritized above landfilling because although all of these processes result in some level of pollution, through converting non-recyclable waste materials into electricity and heat, some of the carbon emissions released are offset by a decreased facility reliance on fossil fuels (Waste Management Options). Within the state of Maine, all WTE's are combustion-based and operate with incineration technology. WTE's are prioritized above landfilling because incineration reduces waste volume by roughly ten percent of the original volume. This will extend the life of landfills, assuming other landfills do not find other wastes to landfill.

Landfilling is the least preferred solid waste disposal technique within the solid waste management hierarchy. While is it true that today's landfills are not just open

dumps and instead must meet stringent design, operation, and closure requirements, serious environmental risks remain, such as ground water contamination through percolation of water through liners and methane gas production that escapes. Landfilling is not an efficient way to use space and resources. Though many landfills are designed to generate and collect methane gas (landfill gas) and the production of this gas results in shrinkage in the volume of the waste landfilled, there is still a fair amount of waste that sits in landfills that does not break down and produce methane. In addition, there are multiple social costs that are connected to landfills such construction, maintenance and closure costs, as well as the cost of maintaining the landfill once it is closed. Such costs are ones that municipalities in Maine are less willing to bear due to factors such as loss of property value, the aforementioned pollution risks and perceived damage to livelihood from negative effects as simple as sight and smell.

The Maine State Solid Waste Management Hierarchy Intentions

The Maine State Solid Waste Management Hierarchy as described above was intended to create state leadership to set the tone for how the state of Maine was, from that point on, going to conduct its solid waste disposal efforts. The hierarchy was initially created as part of an effort on behalf of the state of Maine to protect the environment as well as move towards responsible conservation of resources for future generations through a systematic approach that sought to reduce material waste and its associated environmental impact. Because no single waste management approach is suitable for managing all waste streams in all circumstances, the Maine Department of Environmental Protection (MEDEP) developed and presented the solid waste management hierarchy to the Maine state legislature. This proposal was modeled after the waste management

hierarchy created by the EPA, which also ranks the most environmentally sound strategies for disposal of municipal solid waste in order of priority as to what actions need be taken first (Solid Waste Management Hierarchy). The creation of the solid waste management hierarchy was intended to reduce the amount of waste landfilled in Maine. Doing so would minimize the landfills needed in Maine and extend the life of those that were already operational. Through the enacting of the hierarchy into law, the state stood to benefit in the ways enumerated below.

Economic: The improvement of state-wide economic efficiency through the means of resource reuse, treatment and disposal, as well as the creation of markets for recyclables can lead to efficient state practices in the production and consumption of products and materials. This would result not only in valuable materials being recovered for reuse but also the potential for new jobs and new business opportunities.

Social: The reduction of adverse social impacts (including those pertaining to health) could result through the practice of proper waste management polices, ultimately making towns more appealing for the current and potential residents. These better social advantages could lead to new sources of employment, as well as potentially lifting communities out of poverty. This is particularly relevant in some of the poorer rural communities, where adverse health conditions persist and where landfills are often located.

Environmental: The reduction of adverse impacts on the environment through reducing, reusing and recycling, and by minimizing the amount of waste that is

landfilled could provide Maine with improved air and water quality and reduce greenhouse emissions.

Inter-generational Equity: Statewide adherence to the solid waste management hierarchy could provide subsequent generations with a more robust economy, a cleaner environment, and more land that is untouched by solid waste (Municipal Solid Waste Policy Survey Results).

The Maine State Solid Waste Management Hierarchy Reality

The current hierarchy serves only as *guidance* to Maine's policymakers, as there are no "teeth" to the statute allowing it to actually regulate or influence solid waste management policy decisions. It is clear through simply reading the hierarchy that satisfactory compliance is highly subjective. There are no bright-line rules or requirements present for an organization or company to consult when determining if its actions are considered consistent with the statute (Doyle). This flaw is further demonstrated by the fact that the hierarchy calls for vague action such as a "reduction of waste at the source," and a "reduction of waste volume that is landfilled through the application of waste-to-energy technologies," however these reduction amounts are undefined beyond those simple and subjective statements, and therefore able to be satisfied by close to zero action or adherence on behalf of the towns and the facilities.

Recent Developments

In March of 2014, the Maine State Legislature passed the bill LD 1483, "An Act To Promote and Enhance State Policy To Preserve and Support Existing Methods of Disposal of Municipal Solid Waste" (Appendix D), which strengthened the MEDEP's

utilization of Maine's solid waste hierarchy, by creating within the hierarchy a requirement to demonstrate adherence to the statute before the Department can issue a license for a new waste facility. The addition to the licensing requirement reads in the bold as follows:

D. The practices of the facility are consistent with the State's solid waste management hierarchy set forth in section 2101. The department shall adopt rules incorporating the State's solid waste management hierarchy as a review criterion for licensing approval under this subsection. Rules adopted pursuant to this paragraph are routine technical rules as defined in Title 5, chapter 375, and subchapter 2-A.

While it is commendable to enforce the hierarchy as a necessary component to satisfy in order to receive a license, this does not change the lack of an incentive to decrease land disposal within the hierarchy itself- a fundamental problem, as without such an incentive, the Hierarchy has not become a completely effective statute.

In November of 2014, MEDEP proposed to amend the hierarchy to make the policy consistent with legislation enacted over the past few years concerning recently emerged solid waste disposal facilities disputes. The proposed changes to the solid waste management hierarchy are as follows.

N. Solid Waste Management Hierarchy

1. Standards. The purpose and practices of the solid waste facility must be consistent with the State's solid waste management hierarchy set forth in 38 M.R.S.A. §2101, which establishes that it is the policy of the State to actively promote and encourage waste reduction measures and the maximization of waste diversion efforts, and which sets forth an integrated approach to the management of solid waste generated in and imported to the State, based upon the following order of priority:

(a) Reduction of waste generated at the source, including both amount and toxicity of the waste;

- (b) Reuse of waste;
- (c) Recycling of waste;
- (d) Composting of biodegradable waste;
- (e) Waste processing that reduces the volume of waste needing land
- disposal; including incineration; and,
- (f) Land disposal of waste.

2. Submissions. The application must include evidence that affirmatively demonstrates that the purpose and practices of the solid waste facility are consistent with the solid waste management hierarchy including, but not limited to:

- (a) Solid waste disposal facility. Notwithstanding the provisions of section 6 of this Chapter, evidence that demonstrates that the waste has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable prior to disposal, in order to maximize the amount of material recycled and reused, and to minimize the amount of waste, including incinerator ash, being land disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or processing programs/efforts that the waste is or will be subject to, and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and a description of ongoing efforts to increase the effectiveness of these programs/efforts.
- (b) Solid waste processing facility subject to the provisions of 06-096 CMR 409(2)(C). Evidence of consistency with the standards of 06-096 CMR 409(2)(C); and, evidence of the feasibility of recycling or processing all proposed waste streams into a fuel, raw material 6-096 DEPARTMENT OF ENVIRONMENTAL PROTECTION Chapter 400: General Provisions- 45 substitute or other product in conformance with the applicable provisions of 06-096 CMR 409 and 418.
- (c) All other solid waste facilities except composting, beneficial use and agronomic utilization. Evidence that the facility will, to the maximum extent practicable, incorporate into its design and operation, the implementation of reduction, reuse, recycling, and other waste diversion approaches in order to maximize the amount of waste recycled and reused, and minimize the amount of waste disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or other diversion programs that the waste is or will be subject to and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and, a description of ongoing efforts to increase the effectiveness of these programs/efforts.

The most substantial changes presented in the amended revision of chapter 400:

Solid Waste Rules General Provisions are to implement the hierarchy as a permitting or

approval standard for licensing a facility, instead of as a priority of the State, as it is currently defined. Another change to the hierarchy that is presented within the amended version is that any application for licensing must also include a written description of their proposed practices as evidence demonstrating that the purpose and fulfillment of the solid waste facility in question is consistent with the solid waste management hierarchy.

These alterations to the hierarchy are progressive steps towards state adherence. For solid waste disposal facilities such as incinerators and landfills, these proposed changes would require applicants to demonstrate that their disposed waste has been reduced, reused, recycled, composted and/or processed "to the maximum extent practicable prior to disposal." Other types of facilities found higher up in the hierarchy, such as those involved in recycling, would have to demonstrate that the facility will, to the maximum extent practicable, incorporate into its design and operation reduction, reuse, recycling, and other diversion techniques to minimize the amount of waste that must ultimately be disposed.

This version of the hierarchy is still inadequate however, as it lacks defined rules to incentivize a solid waste facility or municipality to move away from land disposal. While the proposed revisions to the hierarchy are necessary in order to call for state adherence, they are ill equipped to properly deter land disposal of waste, and hence reduce the volume of waste that is landfilled in Maine.

The Maine Solid Waste Management Hierarchy Inadequacies

The most recent example of the Hierarchy failing to reduce the disposal of waste into landfills is the application for a Determination of Public Benefit by the Municipal Review Committee to build a new landfill in either Argyle or Greenbush, Maine.

The Municipal Review Committee's Application for a Public Benefit Determination

The Municipal Review Committee (MRC) is an organization that currently oversees the solid waste disposal practices of 187 entities throughout the state of Maine those being, municipalities, refuse disposal districts, and counties. According to its bylaws, it was formed in 1991 primarily for the purpose of:

Act[ing] as a liaison for and representative of the members, which members are commonly known interchangeably as "Charter Municipalities" and "Member Municipalities", with the Penobscot Energy Recovery Company, Limited Partnership and Bangor-Hydro Electric Company. (Municipal Review Committee).

These member municipalities are currently under contract to dispose of their solid waste at the Penobscot Energy Recovery Company (PERC) Waste to Energy facility in Orrington, Maine and in accordance with their waste disposal agreements with the facility, will continue to do so through 2018.

At present, the PERC facility sells a portion of the electricity that it produces on the market at a favorable and predetermined price, as a result of a power purchase agreement between the PERC (Penobscot Energy Recovery Company) facility and Bangor-Hydro Electric. This agreement, however, comes to an end in 2018, and from that point on

PERC will sell its produced electricity at the competitive market value. As a result of this power purchase agreement, the MRC communities have been paying artificially low tipping fees to dispose of their solid waste at the PERC facility. These tipping fees have been maintained at such low rates, due to the PERC facility offsetting the tipping fees' actual cost with a cash credit to the MRC entities by virtue of the large chunk of revenue it receives as a result of the arrangement with Bangor-Hydro Electric. When this power purchase agreement comes to an end in 2018, however, PERC will need to raise its tipping fees to market value in order to supplement for this lost revenue. It is the threat of this rise in tipping fees that caused the MRC to file in April of 2014, in accordance with M.R.S. §1310-AA (1) (Appendix E), an application for Public Benefit Determination. This application was submitted to the MEDEP for review, in regards to the MRC's request to gain approval to build a new landfill for the utilization of the MRC communities post 2018.

This application was filed in accordance with the Maine statute mandating that before a company or organization can begin applying for a license to construct a new or expand a current solid waste disposal facility, the organization must first apply to the commissioner of the MEDEP for a determination of whether the proposed facility provides a "substantial public benefit" (*Determination of Public Benefit*). Within M.R.S.A § 1310-AA, (Appendix E) there is a list of standards of determination that the MRC was responsible for demonstrating to the Department of Environmental Protection that they qualified for/or were in accordance with throughout their application, in order for substantial public benefit to be determined.

According to M.R.S.A. 38, § 1310-AA (3)(B)(Appendix E), an application must demonstrate to the commissioner that the proposed facility promotes the solid waste management hierarchy. In regards to MRC's proposal, the "proposed facility" in question was the new landfill, as that is the only solid waste disposal facility that is pertinent to a public benefit determination. However, throughout their entire application MRC failed to fulfill the requirement of demonstrating how the landfill "promotes the solid waste management hierarchy as set out in 2101" as was required by law. Instead, it disproportionately focused on the other potential portions of their proposed disposal system. The other portions of the planned system, while progressive in nature, were portions that were not applicable for public benefit determination.

Through discussing only irrelevant portions of their potential processing facility, specifically how they "demonstrate consistency with the State Plan and State of Maine Solid Waste Management Hierarchy" (Municipal Review Committee, Inc.), the MRC inadvertently revealed to the MEDEP the weakness found within its own application. It stands to reason that these irrelevant components of the planned system were the only ones that demonstrated any alignment with the state solid waste management hierarchy, while the landfill component that they were actually applying for did not. This fact is supported when reviewing the consistency section 3.0 of MRC's application for Public Benefit Determination (Municipal Review Committee Public Benefit Determination). This section was written to demonstrate how and why the "proposed facility" (landfill) was consistent with both the solid waste management hierarchy and the state plan. However, the MRC failed to address how the landfill in particular met these

qualifications and instead focused the application on the rest of the potential system, and not the landfill component specifically.

The MRC's public benefit determination application supported by the process facility did not provide clear steps to make the processing facility a reality; no technology was identified and no actual estimate of the tonnage of residuals resulting of the selected technology destined for landfilling was presented. For all intents and purposes, the processing facility appeared theoretical. However the application to construct a new landfill remained in the forefront.

Further indicating a lack of adherence to the hierarchy on behalf of the MRC, is that landfilling is the absolute last rung on the hierarchy, and if applied to the situation correctly would only been incorporated as a final option. Because of this, if the MEDEP were to determine substantial public benefit resulting from a new landfill being constructed, before any other rungs on the hierarchy had been proven to be satisfied, it would be in direct contradiction with the solid waste management hierarchy including the legislation stating:

It is the policy of the State to use the order of priority in this subsection as a guiding principle in making decision related to solid waste management (Appendix B).

Furthermore, all of the 187 communities that the MRC represented at the time of the application were disposing of their solid waste at the PERC Waste to Energy facility, which is an incinerator. In accordance with the solid waste management hierarchy, incineration is favored on the hierarchy before land disposal. The MRC however, was proposing the shutdown of an operational incinerator (the PERC facility) to instead build

a new landfill for the disposal of their waste. As there was no supporting evidence at the time of application that suggested that the rest of the processing facility was going to exist, determining substantial public benefit for this application would consequentially be moving down the hierarchy- from incineration to landfilling- directly contradicting the statutory expectations of the MEDEP to only determine substantial public benefit when it is in *promotion* of the hierarchy, meaning advancement of rank or position.

It is important to note that the MEDEP did in fact issue a draft rejection of MRC's application for determination of public benefit in late September of 2014. However this denial was based on a lack of need for new landfilling capacity in Maine; not based on the inconsistencies of the application with the solid waste management hierarchy. The only mention in fact, of the hierarchy playing a role in their decision within the draft denial, was when the MEDEP stated within their conclusions that:

"MRC's proposal for a landfill that might accept up to 180,000 tons per year of unprocessed MSW is not consistent with the state plan, is not based on the waste hierarchy, and is not consistent with the state's goals for recycling, composting, or waste reduction" (Municipal Review Committee Public Benefit Determination).

The fact that this landfill was not rejected also on the basis of failing to meet the standards of the state solid waste management hierarchy and that the hierarchy was only mentioned once within a 29-page denial order suggests that the hierarchy as it is currently written is not working as intended for the state of Maine. It is clear it needs to be strengthened with an incentive to move away from land disposal and with a call for adherence in order to actually have a strong role in regulating solid waste facilities within the state.

Municipal Solid Waste Policy Survey

Many Maine municipalities echo the opinion that the Hierarchy is insufficient at promoting sustainable waste disposal. During the summer of 2014 the Maine Municipal Association (MMA), in conjunction with the Maine Resource Recovery Association, developed and issued a survey to each of the MMA's 487 municipal members (out of 492 total municipalities in Maine). This survey was focused on the current solid waste policies of the state (Municipal Solid Waste Policy Survey Results). Fifty-nine municipalities of varying population sizes, waste disposal methods, and geographic locations throughout the state responded to the survey.

When these municipalities were asked, "What actions could the state take to help your municipality increase its adherence to the top part of the solid waste hierarchy (reducing, reusing, recycling, and composting) and depend less on the lower part of the solid waste hierarchy (incineration and landfilling)?" The vast majority respondents indicated their desire for financial aspects to be included within the Hierarchy, both in the forms of incentives to reduce landfilling, and in grants and subsidies. Municipalities showed that their strongest preference was to have the State provide grants for recycling infrastructure and encourage the development of recycling businesses, followed by creating financial rewards for achieving high recycling levels.

When these municipalities were asked "Aside from cost, what factors influenced their solid waste management decisions in their communities?" it was reported that the structure of the established hierarchy as it reads today, is one of the least significant factors that influence decisions that these communities make regarding their waste disposal practices (only 27 % reported it had any influence at all). This response from the

state of Maine municipalities confirms that the Hierarchy needs to be updated given that

it fails to to play a substantial role in municipalities' decisions relating to solid waste

disposal as it was intended.

When the municipalities were asked "What, if anything, inhibits a municipality's

ability to adhere to the hierarchy?" one Maine municipality responded that

Consideration of some other measures to make landfilling solid waste a disincentive would further advance the State's solid waste hierarchy goals, such as assessing a State fee to municipalities or entities that select use of landfilling as opposed to accessing available waste to energy facilities and other diversion efforts. This would help to ensure that the State supports the hierarchy goals and provides a direct incentive to utilize other approaches" (Municipal Solid Waste Policy Survey Results).

Another municipality responded similarly stating,

We are required by contract to incinerate MSW at PERC facility until 2018. Towns that are not meeting their guaranteed tonnage as part of that contract have disincentive to reduce, reuse, recycle, which would further decrease their tonnage. That disincentive needs to be eliminated" (Municipal Solid Waste Policy Survey Results).

Time Line of Maine State Solid Waste Disposal Developments

March 2014: Maine State Legislature passed the bill LD 1483, "An Act To Promote and Enhance State Policy To Preserve and Support Existing Methods of Disposal of Municipal Solid Waste".

April 2014: Municipal Review Committee filed application for Public Benefit Determination.

June 2014: Maine Municipal Association (MMA) issued Maine Solid Waste Policy Survey.

September 2014: MEDEP issued draft denial of the Municipal Review Committee's application for Public Benefit Determination.

November 2014: MEDEP proposed to amend the Solid Waste Management Hierarchy.

Addressing the Issues Within the Hierarchy

A fundamental problem that exists in solid waste disposal around the state is that incentives exist for landfill owning companies that are counter productive to the intentions of the Hierarchy. For these private companies, increased profit is associated with increased tonnage, and therefore landfills throughout the State issue minimum tonnage requirements to municipalities. Consequently, towns will never willing or able to reduce the amount of waste that they are producing as landfill companies would penalize them for doing so. This issue suggests that the incentive structure for landfill operators needs to change, and these companies need to be rewarded for diversion and receive income from something other than tonnage (Allers, 2009).

An implementation of a "landfill tax" into the hierarchy could play a huge role in successfully facilitating increased diversion of waste from landfills. While states around the country have taken other avenues to work towards decreasing waste landfilled, nowhere does there exists a "landfill tax" in United States as is the case in the United Kingdom (Resource Efficiency Indicators). In the UK, a tax is levied on the tonnage of waste entering a landfill. The taxing of tonnage would encourage efforts to minimize the amount of waste produced through the use of the other rungs of the Hierarchy. This tax or fee would be imposed on landfills as a means of raising revenue to fund diversion programs, while at the same time acting as a means of inhibiting disposal by raising the cost in comparison to preferable alternatives, in the same manner as an excise tax.

A drawback of a tax such as this may be that taxes are never seen as a popular solution, however this does not change the fact that taxing can be a very effective

government tool to entice change in systems. The landfill tax implemented by the United Kingdom should be emulated in Maine.

The United Kingdom "Excise Notice LFT1: a general guide to Landfill Tax"

In 1996 the United Kingdom introduced their first landfill tax, which was the first environmental tax the UK ever experienced. This tax has been amended and updated many times since its original introduction; in March 27th of 2015 the most recent version was presented in The United Kingdom Government release of a notice entitled "Excise Notice LFT1: a general guide to Landfill Tax" (United Kingdom). Within this notice the UK government outlined the purpose and scope of the improved landfill tax they were implementing, as well as its intended results. The UK landfill tax is to be paid by the landfill operators or the landfill controllers when any waste is disposed of, and is chargeable by the weight of the solid waste upon arrival at the landfilling site. Through the implementation of this tax, the disposal site is incentivized to minimize the amount of waste that they accept. This landfill tax also includes a credit component; which incentivizes landfill operators to increase the diversion occurring at their facility. If waste is landfilled temporarily with the intention of later recycling, incinerating or removing it for re-use, when the waste is removed for its intended purpose, the landfill operator will be able to claim a credit of the tax that was accounted for and paid on the original disposal at the site. This credit is only applicable, however, if the landfill operator informs the UK government that the waste will only be there temporarily *before* the waste is landfilled, and it is also a requirement that the waste is removed within 12 months of its arrival at the facility.

This ability to get their money back acts as an incentive for landfill operators to reduce the volume that ultimately resides within their landfill, as well as to pursue effective ways for this reduction to occur; whether those are front load recycling, composting of organics, or the utilization of organics to create biofuels. Finally, this notice includes the creation of a "Landfill Communities Fund". This Landfill Communities Fund scheme encourages landfill site operators in the UK to fund local community environmental projects, as through this scheme they can claim a tax credit for contributions they make to approved "environmental bodies", which consist of environmental non-profits, charities, and research entities. There is also a range of criminal offences and civil penalties that are associated to the UK landfill tax in order to make it enforceable. Penalties are applied to encourage taxpayers to comply with their obligations, to act as a sanction for those who don't, and to reassure the compliant majority that those who do not play by the rules will not disadvantage those who do.

This UK framework allows for two things: it effectively increases the incentive for landfills to involve themselves with more progressive forms of disposal such as recycling and composting, and it decouples profit from tonnage- because decreased accepted tonnage will mean less taxes for the landfill operator.

In the past 17 years that a version of this landfill tax has existed in the UK, significant positive changes have occurred. The recycling rates have increased in UK from around seven percent in 1996 when it was first enacted to 43 percent today, it reduced the amount of waste landfilled in absolute terms, it helped transform the waste sector, and it led to an increase in energy from waste plants. This tax was successful in the UK because it began with a low fee and escalated over the years (from \$10.66 to \$109

per ton over the course of 17 years). The tax slowly progressed from simply covering the negative externalities to moving towards stimulating change in behavior. The UK landfill tax was effective at reducing waste and increasing recycling because the tax created opportunities instead of just minimizing risks. The UK government posed the tax as an opportunity for innovation rather than just a risk mitigation tool, by giving landfill operators significant incentives to invest in environmental projects and rewarding them when they did make this investment by returning money to them when they diverted waste from their landfill.

The Implementation of Landfill Tax for the State of Maine

In environmental situations, taxing is a government tool that works effectively to directly address the failure of markets to take environmental impacts into account, by incorporating these impacts into prices (Handbook of Research on Environmental Taxation). What this means, is that a well-designed environmental tax is capable of increasing the price of a good or activity to reflect the cost of the environmental harm that it imposes on others; in the case of landfilling, the economic, social, and environmental harm that is associated with landfill sites. The cost of the harm to others, the "externality," is thereby internalized into these market prices. This internalization ensures that consumers and firms take these "costs" into account in their decisions. In contrast to regulations or subsidies, however, a tax leaves consumers and businesses fully flexible to decide how to change their behavior to reduce the harmful activity. This allows market forces to determine the least costly way to reduce environmental damage. When deciding the parameters of this landfill tax, the State government should consider the following.

1) The landfill tax should be targeted to the pollutant or polluting behavior:

An environmental tax generally should be levied as directly as possible on the pollutant or action causing the environmental damage. In this case the target would be the landfill operators or controllers. Using the tax to increase the market cost of the activity of disposal helps to incentivize the full range of potential alternative options, such as the utilization and investment in cleaner and more complete diversion and disposal processes.

2) The scope of a landfill tax should be as broad as the scope of the environmental damage that is caused:

This relates to the political jurisdiction that imposes the tax. Maine landfills affect the entire state, and therefore the scope of a tax or charge on waste disposal would effectively be imposed at the state level.

3) The tax rate should commensurate with the environmental damage:

Setting the tax rate to reflect the environmental damage ensures that prices faced by producers and consumers reflect the environmental costs of their actions. This provides them with a financial incentive to take those impacts into account in their decisions. The valuation process of what to set a tax at can be difficult when the damage is done to things that do not have a clear and independent market value; such as clean air, ground water pollution, or simply available ground space in Maine. In cases such as these, calculations based on the value of human life and of quality of life are implicit for this valuation process. The process is easier when a specific environmental outcome is adopted as a target, as the tax rate can be derived to achieve this target. This is the case in Maine, where there is an un-met state recycling goal of 50 percent reduction of waste.

4) The tax must be credible and its amount increased at a predictable rate in order to motivate environmental improvements:

In the short-term when a tax is implemented, landfill operators may reduce intake and municipalities may adopt less waste producing behaviors in response to disposal price increases. If the tax changes were quickly reversed, however, economic agents could easily resume former behaviors without much cost or effort. Structural responses are more fundamental changes with longer-term consequences- requiring a tax to be implemented at a low rate, and increased throughout the years to follow. For a landfill tax to induce structural changes in the waste disposal field the policy must be "credible," meaning the public must be convinced that the government is committed to implementing the tax; including levying the consequences for not following through. Ample dialogue with stakeholders in the solid waste disposal field, as well as clear communication regarding the use of revenue raised, the distributional impacts (who the tax responsibility falls on), and how the government intends to deal with these impacts, are all important tools for building credibility.

5) Environmental taxes may need to be combined with other policy instruments to address certain issues:

The utilization of a landfill credit as well as grants to strengthen other forms of municipal diversion combined with this tax, are likely to have a better overall environmental impact than just the tax alone. By combining the disposal tax with the landfill credit and municipal diversion grant program, there are also positive incentives incorporated into the hierarchy statute to help a landfill operator or municipality move away from simple land disposal of waste.

Within the state of Maine, the newly proposed version of solid waste management hierarchy (Appendix D) should be further amended so as to include a landfill taxmeaning a tax that takes into account the above-mentioned considerations, and is levied to the landfill operators. Likewise, it should also be updated to include a landfill credit system that operates the same way that the one in the United Kingdom does, so as to incentivize more responsible disposal tactics throughout the State and to reduce volume of waste landfilled in Maine.

We need to incentivize the waste hierarchy and do whatever possible to divert waste from landfills. Landfilling is simply a waste storage strategy that pushes the true cost of dealing with the waste off to future generations. There are much better alternatives, but we need responsible state grants that provide incentives and help municipalities divert waste from landfills. Landfilling currently is a more affordable option for many communities but it is short sighted - landfills have long term consequences that must be considered (Municipal Solid Waste Policy Survey Results).

As exemplified by this quote as well as many other responses within the Municipal Solid Waste Policy Survey, municipalities would also like to see grants inserted into the hierarchy statute, so that they have more funding to increase their recycling efforts- and therefore further reduce the amount of waste that they need to dispose of. The landfill tax added to the hierarchy would be utilized to raise revenue for this public spending, in order to give to the municipalities the tools they have expressed a need for to be capable of greater promoting the hierarchy and incentivizing all of the other more preferred priorities. These additions to the solid waste management hierarchy should not be to the current law version (Appendix B) but instead to the proposed version by the legislature as it reads in Appendix C, as this is already a much more progressive version that includes a lot of important advances that strengthen the legislative role of the hierarchy- such as making sure that waste processing facilities must adhere to the order of priorities within the hierarchy as they are written. The further suggested additions to the Hierarchy that could help disincentive land disposal and therefore effectively reduce the volume of waste landfilled in Maine are bolded within this version below.

N. Solid Waste Management Hierarchy

1. Standards. The purpose and practices of the solid waste facility must be consistent with the State's solid waste management hierarchy set forth in 38 M.R.S.A. §2101, which establishes that it is the policy of the State to actively promote and encourage waste reduction measures and the maximization of waste diversion efforts, and which sets forth an integrated approach to the management of solid waste generated in and imported to the State, based upon the following order of priority:

(a) Reduction of waste generated at the source, including both amount and toxicity of the waste;

- (b) Reuse of waste;
- (c) Recycling of waste;
- (d) Composting of biodegradable waste;
- (e) Waste processing that reduces the volume of waste needing land disposal; including incineration; and,
- (f) Land disposal of waste.

2. Submissions. The application must include evidence that affirmatively demonstrates that the purpose and practices of the solid waste facility are consistent with the solid waste management hierarchy including, but not limited to:

- (d) Solid waste disposal facility. Notwithstanding the provisions of section 6 of this Chapter, evidence that demonstrates that the waste has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable prior to disposal, in order to maximize the amount of material recycled and reused, and to minimize the amount of waste, including incinerator ash, being land disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or processing programs/efforts that the waste is or will be subject to, and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and a description of ongoing efforts to increase the effectiveness of these programs/efforts.
- (e) Solid waste processing facility subject to the provisions of 06-096 CMR 409(2)(C). Evidence of consistency with the standards of 06-096 CMR

409(2)(C); and, evidence of the feasibility of recycling or processing all proposed waste streams into a fuel, raw material 6-096 DEPARTMENT OF ENVIRONMENTAL PROTECTION Chapter 400: General Provisions- 45 - substitute or other product in conformance with the applicable provisions of 06-096 CMR 409 and 418.

- (f) All other solid waste facilities except composting, beneficial use and agronomic utilization. Evidence that the facility will, to the maximum extent practicable, incorporate into its design and operation, the implementation of reduction, reuse, recycling, and other waste diversion approaches in order to maximize the amount of waste recycled and reused, and minimize the amount of waste disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or other diversion programs that the waste is or will be subject to and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and, a description of ongoing efforts to increase the effectiveness of these programs/efforts.
- (g) Solid waste disposal facilities are subject to a landfill tax, the rate of which is to be determined by the state and is chargeable by tonnage received. Solid waste disposal facilities can qualify for a landfill tax credit if waste is landfilled temporarily with the intention of later recycling, composting, energy recovery, or removing it for re-use. If waste is removed from solid waste disposal facilities for these explicit reasons the facility will be eligible to claim a credit of the tax accounted for and paid on the original disposal at disposal site, if the following conditions are met; (a) The waste was, prior to arrival at the solid was disposal facility, documented with the state as temporary status. (b) The waste is removed from the solid waste disposal facility within 12 months of its arrival.
- (h) The purpose of this landfill tax is to establish a grant for municipalities to provide them with the aid needed to increase municipal diversion of solid waste through both recycling and composting efforts implemented on the community level.

Discussion

These aforementioned additions to the solid waste management hierarchy would result in state implementation that better represents the ideals of the Hierarchy; as these changes insert structure to the hierarchy that was not previously there; meaning monetary fines levied on the landfill operators that accompany tonnage disposal. A landfill tax such as the one presented within this paper would also decouple tonnage and profit for the landfill operators, which would incentivize landfill operators and controllers to enact better diversion habits; as acting in such a manner would actually result in the most profit in their pocket, due to the proposed landfill credit returned for these activities. Finally, these additions to the solid waste management hierarchy would allow for the state to better aid municipalities in their community level recycling and diversion efforts, by providing them with grant money for this undertaking.

Asides from a landfill tax, there are other alternatives that have been utilized around the world to remove waste from the waste stream and to generate funding. One of the most prominent is that of 'Extended Producer Responsibility'. Extended Producer Responsibility (EPR) first emerged in 1999, through the 'Green Dot' Program in Germany. The basic idea behind the Green Dot was that consumers who saw the logo knew that the manufacturer of the product contributed to the cost of recovery and recycling (An Examination of EPR's Impact on Innovation and Greening Products). This program has now transformed into "Extended Producer Responsibility", which is practiced in many countries around the world. EPR is a program that uses financial incentives to encourage manufacturers to design environmentally friendly products, by holding the producers responsible for the costs of managing their products at end of life. This policy approach was developed to attempt to relieve local governments of the costs of managing responsible solid waste disposal, by shifting the cost to manufacturers, and requiring them to internalize the cost of recycling within the product price when it is initially sold (Extended Producer Responsibility). EPR is designed to encourage the producer to confront and handle the costs of end-of-life disposal of the products they produce, hence providing incentives for the producer to take account of these costs in

designing their products (A Guidance Manual for Governments). Extended Producer Responsibility is certainly another policy approach that might be employed to encourage recycling and reduce waste, depending economic and political considerations.

If a landfill tax were to ever be implemented into the Hierarchy, the economic impact of the tax would have to be assessed by completing a Regulatory Impact Analysis. The role of an RIA is to provide a detailed appraisal of the potential impacts of a new regulation, in order to assess whether the regulation is likely to achieve its desired objectives, and if it will have more benefits than costs. The RIA should also be used to determine the intensity of the starting tax rate, as well as how the tax would be increased throughout the years to follow. These further actions would likely change the language of the proposed additions to be more specific, so while it is quite clear that this recommendation for implementation is just an initial step in the direction of change, I feel that is an important one that lays solid groundwork for other steps to follow.

To conclude, it is important to address one of the first concerns that would arise when discussing imposing a landfill tax; the fact that landfill operators are likely to pass down, at least in part, some of the burden of this new tax in the form of higher tipping fees for municipalities. The truth of the matter is that the incentive to reduce disposal volumes needs to hit every part of the market, and consequentially this distribution of the tax burden is not necessarily a completely bad thing. Simply because towns do not want to have to pay the true cost to dispose of their waste does not render these costs outrageous or insurmountable. If decisions regarding solid waste disposal are made based entirely on monetary factors for municipalities, then the state will not be capable of making any substantial progress towards their maximum reduction effort. Responsible

and environmentally aware solid waste disposal is a costly activity and should be handled as such. It is only by bearing the true cost of disposing of solid waste that will incentivize municipalities to work towards minimum garbage production, and maximum material diversion on a community level- perhaps by motivating implementation of a "pay as you throw" system or something similar, to help pas. Unfortunately the course of action that leads to the lowest bottom line and the course that will most faithfully support the Hierarchy are not aligned. In situations such as these, a tax is needed to internalize the negative external costs.

The threats that are associated with the severity of improper utilization of diversion tactics are serious. As the population continues to skyrocket around the world, landfills and the health and other environmental threats that are associated with them will only become more of a public issue as time goes on. The world's 50 biggest waste dumps are located in very poor countries that have no financial or human resources to manage them, and these landfills are growing in size everyday, affecting the health of over 60 million people, and polluting rivers, lakes, and the oceans. These landfills should not be seen as local problems but rather threats to the world community as a majority of the waste that is dumped in these landfills does not originate in these developing countries and instead is shipped there from developed countries based on the mantra of "not in my backyard." However if the developed world continues to rapidly landfill waste, there may come a time when our own backyards are the only places that are left with available landfilling space. The state of Maine can take a progressive step in the direction towards decreasing the volume of waste landfilled by amending the state solid waste management

hierarchy so that it truly works for its intended purpose of incentivizing all forms of diversion and discouraging any form of landfilling state wide.

References

- 2014 Sustainability Report, Capturing Value from Waste through Innovative Research Solution. (2014). Retrieved from <u>http://www.casella.com/sites/default/files/2015/jan/files/2014_casellasustainab</u> <u>ilityreport.pdf</u>
- 8, E. S. (2014). LANDFILL CREDIT ACCOUNT PROCEDURES. Union County Public Works. Retrieved from http://www.co.union.nc.us/Portals/0/PublicWorks/News%20-%20AW/UNION%20COUNTY%20SOLID%20WASTE%20CUSTOMER%2 0CREDIT%20PROCEDURE%20%28FINAL%29%20EFFECTIVE%209-8-14.pdf
- About the Landfill Communities Fund. (n.d.). Retrieved from http://www.entrust.org.uk/landfill-community-fund
- Allers, M., & Hoeben, C. (2009, September 19). Effects of Unit-Based Garbage Pricing: A Differences-in-Differences Approach. Retrieved from http%3A%2F%2Fdownloadv2.springer.com%2Fstatic%2Fpdf%2F927%2Fart%25253A10.1007%25252Fs 10640-009-9320
- "An Examination of EPR's Impact on Innovation and Greening Products." (2006): n. pag. *Greenpeace*. Web.
- Blackmer, T., Criner, G., Hart, D., Isenhour, C., Peckenham, J., Rock, C., . . . Silka, L. (n.d.). Solid Waste Management in Maine: Past, Present and Future. Retrieved from <u>http://umaine.edu/mitchellcenter/files/2015/02/FINALSolid-Waste-Whitepaper-2.pdf</u>
- Bradley, L. (2014, August 1). E-Waste in Developing Countries Endangers Environment. Retrieved from <u>http://www.usnews.com/news/articles/2014/08/01/e-waste-in-</u> developing-countries-endangers-environment-locals
- Criner, G. (2013). Paying Now or Paying Later for Maine's Solid Waste Management. Retrieved from <u>http://www.doylenelson.com/cmsAdmin/uploads/criner-reportpdf.pdf</u>
- Doyle, T. (2014, November 3). Maine DEP Proposes to Revamp Solid Waste Rules. Retrieved from <u>http://www.pierceatwood.com/maine-dep-proposes-to-revamp-solid-waste-rules</u>

Ecomaine. (n.d.). Retrieved from http://www.ecomaine.org/about-ecomaine/history/

- Emissions Standards Reference Guide. (n.d.). Retrieved from http://www.epa.gov/otaq/standards/
- "Extended Producer Responsibility." Organization for Economic Co-Operation and Development, n.d. Web. 03 May 2015.
- A Guidance Manual for Governments. N.p.: n.p., n.d. *Extended Producer Responsibility*. Organization for Economic Co-Operation and Development. Web.
- Handbook of Research on Environmental Taxation. (2013). *Management of Environmental Quality: An International Journal, 24*(3). doi:10.1108/meq.2013.08324caa.010
- The House Explained. (n.d.). Retrieved from http://www.house.gov/content/learn/legislative_process/
- Juniper Ridge Landfill. (n.d.). Retrieved from http://www.maine.gov/dep/waste/juniperridge/
- Mitigation of Climate Change. (2007, November 12). Retrieved from <u>https://books.google.com/books?id=U_4ltxID60UC&pg=PA609&lpg=PA609</u> <u>&dq=decoupled%2Blandfill%2Bpayment&source=bl&ots=AMCB2gK0X3&s</u> <u>ig=GTU1vTrSBtNbjLe61yb9xF1_pLo&hl=en&sa=X&ei=ZMomVdjoA4njsA</u> <u>TzpICIDw&ved=0CB4Q6AEwAA#v=onepage&q=decoupled%20landfill%20</u> <u>payment&f=false</u>
- Municipal Review Committee, Inc. (MRC). (n.d.). Retrieved from http://www.maine.gov/dep/waste/mrc/index.html

Municipal Review Committee. (n.d.). Retrieved from http://mrcmaine.org/

- Municipal Review Committee Public Benefit Determination. (2014). Department of Environmental Protection. Retrieved from <u>http://www.maine.gov/dep/waste/mrc/documents/MRC%20draft%20for%20pu</u> <u>blic%20comment%209-24-2014.pdf</u>
- Municipal Solid Waste Policy Survey Results. (2014, September). Retrieved from https%3A%2F%2Fwww.memun.org%2FDesktopModules%2FBring2mind%2 FDMX%2FDownload.aspx%3FEntryId%3D7860%26Command%3DCore_Do wnload%26PortalId%3D0%26TabId%3D598

Penobscot Energy Recovery Company. (n.d.). Retrieved from http://www.percwte.com/

Policy, S. F. (2014). Resource Efficiency Indicators. *Science for Environmental Policy, 4*. Retrieved from http://ec.europa.eu/environment/integration/research/newsalert/pdf/IR4_en.pdf Reuse Everyday Items. (2008, November 27). Retrieved from <u>http://www.recycling-guide.org.uk/reuse.html</u>

Solid Waste Management Hierarchy. (n.d.). Retrieved from http://www.epa.gov/wastes/nonhaz/municipal/hierarchy.htm

22nd Annual Maine Recycling. (n.d.). Retrieved from http://www.mrra.net/ United Kingdom, HM Revenue and Customs. (2015, March 27). *Excise Notice LFT1: A General Guide to Landfill Tax*. Retrieved from <u>https://www.gov.uk/government/publications/excise-notice-lft1-a-general-guide-to-landfill-tax/excise-notice-lft1-a-general-guide-to-landfill-tax</u>

United States. (n.d.). *Maine Revised Statutes*. Retrieved from http://www.mainelegislature.org/legis/statutes/38/title38sec2101.html

Vidal, J. (2014, October 6). Smelly, contaminated, full of disease: The world's open dumps are growing. Retrieved from http%3A%2F%2Fwww.theguardian.com%2Fglobaldevelopment%2F2014%2Foct%2F06%2Fsmelly-contaminated-diseaseworlds-open-dumps

- Waste Generation and Disposal Capacity Report for Calendar Year 2011. (n.d.). Bureau of Remediation and Waste Management. Retrieved from <u>https://www1.maine.gov/decd/meocd/landfills/docs/2013%20Waste%20Gener</u> <u>ation_Capacity%20Report.pdf</u>
- Waste Management Options. (n.d.). Retrieved from http://www.epa.gov/osw/homeland/options.htm#landfill
- Waste Management Rules. (n.d.). Retrieved from http://www.maine.gov/dep/waste/rules/index.html

Weddle, C. L. (2013). Landfill Gas Utilization at a Wastewater Treatment Plant. *Journal* (*Water Pollution Control Federation*), 55(11).

What is Reduce, Reuse, Recycle? (n.d.). Retrieved from http://whatis.techtarget.com/definition/Reduce-reuse-recycle-R3

Appendix A: Letter from Town of Greenbush to DEP

FARRELL, ROSENBLATT & RUSSELL

ATTORNEYS AT LAW 61 MAIN STREET P.O. BOX 738 BANGOR, MAINE 04402-0738

ANGELA M. FARRELL NATHANDEL M. ROSENBLATT THOMAS A. RUSSELL JON A. HADDOW GREGORY P. DORR ROGER L. HUBER

August 16, 2014

TELEPHONE (207) 990-3314 TELECOPIER (207) 941-0239 e-mail: info@frrlegal.com

Karen Knuuti, Environmental Specialist Bureau of Remediation and Waste Management Department of Environmental Protection Eastern Maine Regional Office 106 Hogan Road Bangor, Maine 04401

Re: Municipal Review Committee, Inc.'s Application for Public Benefit Determination – Comments from Town of Greenbush

Dear Karen:

As you know, this firm represents the Town of Greenbush, Maine (the "Town") in connection with Municipal Review Committee, Inc.'s ("MRC") efforts to locate a solid waste disposal facility in Greenbush or Argyle. This letter is intended to serve as the Town's formal comments on MRC's Application for a Determination of Public Benefit ("Application") currently pending before the Maine Department of Environmental Protection ("DEP").

INTRODUCTION

As detailed in our prior letters to the DEP, the Town asserts that the DEP must dismiss MRC's application because Maine law prohibits the processing and approval of new commercial solid waste disposal facilities, including those owned and operated by so-called Regional Associations like MRC. Even if Regional Associations were exempt from the ban on commercial solid waste disposal facilities, MRC would not so qualify because under 38 M.R.S.A. § 1303-C(24)(B) only Regional Associations that are organized "for the purpose of owning, constructing or operating a solid waste disposal facility" may do so. Unfortunately, MRC was not (and is not) organized for that purpose.

In addition to the foregoing arguments (and without waiving the same), the Town asserts that the Commissioner must also find that the proposed solid waste disposal facility does not provide a substantial public benefit and deny MRC's application. Karen Knuuti, Environmental Specialist August 16, 2014 Page 2 of 15

APPLICABLE LAW

Title 38 M.R.S.A. § 1310-AA establishes the process and standards for determining whether a proposed solid waste disposal facility provides a substantial public benefit. 38 M.R.S.A. § 1310-AA reads as follows:

Standards for determination. The commissioner shall find that the proposed facility under subsection 1 or the acceptance of waste that is not generated within the State under subsection 1-A provides a substantial public benefit if the applicant demonstrates to the commissioner that the proposed facility or the acceptance of waste that is not generated within the State:

- A. Meets immediate, short-term or long-term capacity needs of the State. For purposes of this paragraph, "immediate" means within the next 3 years, "short-term" means within the next 5 years and "long term" means within the next 10 years. When evaluating whether a proposed facility meets the capacity needs of the State, the commissioner shall consider relevant local and regional needs as appropriate and the regional nature of the development and use of disposal capacity due to transportation distances and other factors;
- B. Except for expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling, is consistent with the state waste management and recycling plan and promotes the solid waste management hierarchy as set out in section 2101;
- C. Is not inconsistent with local, regional or state waste collection, storage, transportation, processing or disposal; and
- D. For a determination of public benefit under subsection 1-A only, facilitates the operation of a solid waste disposal facility and the operation of that solid waste disposal facility would be precluded or significantly impaired if the waste is not accepted.

BURDEN OF PROOF

MRC carries the burden to prove by a preponderance of the evidence that its proposed solid waste disposal facility provides a "substantial public benefit." For the reasons set forth in this letter, MRC has utterly failed to satisfy that burden. With respect to capacity, MRC has demonstrated only that it would "prefer" to have its own solid waste disposal facility so that it can control its usage; unfortunately, that is not the test. The test is whether *another* solid waste disposal facility is necessary in this region in order to meet demonstrated needs of the State. Karen Knuuti, Environmental Specialist August 16, 2014 Page 3 of 15

MRC has failed to demonstrate why the existing solid waste disposal facilities, three of which are State-owned, do not already adequately satisfy the State's needs.

MRC's entire argument is one of economics, not need. Understandably, MRC wants to keep its members' disposal costs as low as possible. For the past 20+ years, MRC's member municipalities have, effectively, paid below market rates for disposal of their solid waste. MRC's members have enjoyed those favorable rates due, in large part, to the Power Purchase Agreement between PERC and Emera. That PPA is set to expire, however, in 2018. MRC seems to equate its "need" to keep costs low with the State's landfill capacity needs. Those are false equivalents. The mere fact that MRC's members may, as a result the PPA's expiration, pay closer to "market rates" post-2018 for disposal of their solid wastes is completely irrelevant to the central question; namely: does MRC's proposed facility meet any immediate, short-term, or long term capacity needs of the State.

MRC has also failed to carry its statutory burden to prove by a preponderance of the evidence that its planned solid waste disposal facility promotes the State's solid waste management hierarchy. While we understand that the Public Benefits test applies only to the landfill component of MRC's project, the law does specifically require that MRC demonstrate how the proposed facility promotes the State's solid waste management hierarchy. Unfortunately, it is impossible to discern from MRC's application whether the landfill component promotes the solid waste management hierarchy because the application contains a dearth of information about the processing component of MRC's operation leading, except for landfilling. MRC's application does contain a few ideas about how the waste *might* be processed, but those ideas are purely speculative. MRC offers no concrete plans whatsoever. For the most part, MRC's suggested technologies are completely untested in New England and, in some cases, the United States.

Interestingly, even MRC acknowledges the speculative nature of its proposal. In its Application, MRC states that capacity is necessary

to provide the MRC the flexibility to accept a range of types and quantities of waste that might need to be land filled in the event that the measures for achieving the maximum practical level of diversion are less successful than had been projected.

(Application, page 1-15). MRC has no idea what technology it will use. As a result, MRC cannot specify what types of waste and how much of each type of waste will require landfilling. It is, quite simply, impossible to make a capacity determination in the vacuum created by the lack of specific information. Indeed, there is no guarantee that the waste would be processed *at all* before disposal.

MRC certainly makes a compelling case that there is a *private* benefit to be served by its proposed solid waste disposal facility. Under MRC's proposal, it will have sole access and control to its own "private" landfill. As such, it will have maximum ability to control its members' solid waste disposal costs. Again, we understand MRC's desire to control its Karen Knuuti, Environmental Specialist August 16, 2014 Page 4 of 15

members' costs. One's ability to control its own costs, however, is not what the Public Benefitstest is all about. In order to satisfy the *Public* Benefits test, MRC must show that the State, not MRC, has immediate, short-term or long-term capacity needs and that the proposal fulfills some or all of those needs. As detailed below, the State has no immediate, short-term, or long-term capacity needs in the region and, therefore, no needs to fulfill. MRC has failed to carry its burden to demonstrate otherwise.

CAPACITY NEEDS

I. MRC has failed to demonstrate that the proposed facility meets immediate, short-term, or long-term capacity needs of the State, as required by 38 M.R.S.A. § 1310-AA (3)(A).

MRC must demonstrate that its planned solid waste disposal facility meets the State's immediate, short-term, or long-term capacity needs. For the reasons set forth below, it has failed to do so.

A. MRC's entire application is premised on the unfounded notion that PERC will not be operational post-2018.

As a preliminary matter, it is important to understand that MRC's entire capacity analysis is premised on the notion that PERC will cease operating post-2018. This unfounded claim is based on the assumption that PERC cannot operate without MRC's continued participation. MRC offers no factual support for this assumption, only its self-serving declarations. Furthermore, those assumptions are completely contrary to the evidence presented to the Department; namely, PERC's repeated demonstration that it can (and will) continue to operate with or without MRC's continued involvement.

Importantly, MRC is merely a limited partner in PERC, not an owner. As such, MRC has no authority to speak on PERC's behalf. MRC certainly has no authority to commit PERC on post-2018 operations. Despite efforts to sound authoritative on the matter, MRC presents absolutely no evidence to support its claim that PERC will be non-operational post-2018 and that, as a result, the disposal capacity offered by PERC will be unavailable.

PERC is a 25.5 megawatt, 1,000 tons-per-day, waste-to-energy processing facility operating at full capacity. Contrary to MRC's claim, it is not just going to simply disappear in 2018. PERC insists that it *will* remain open and operational post-2018, whether or not some of the MRC communities choose to leave. At PERC's informational meeting held on June 17, 2014, regarding their post-2018 planning, they assured the general public of their facility's ability to adapt in regards to the tonnage they receive and process, therefore continuing forward as a viable option post-2018.

MRC's has the sole burden to demonstrate by a preponderance of the evidence that PERC will cease operation post-2018. MRC fails in that regard. In fact, in its application MRC

Karen Knuuti, Environmental Specialist August 16, 2014 Page 5 of 15

concedes that the only reason it eliminates PERC as having disposal capacity post-2018 is because "there could be no assurance that the PERC Facility in its current configuration, and under current business arrangements extended as is, can continue to be a feasible component of a long-term system of MSW management that complies with the hierarchy and with the MRC vision []." (Application, page 2-1). In essence, MRC has decided to move away from PERC because of *business reasons*, not because PERC will not have ample disposal capacity post-2018.

MRC's conclusion lacks any real factual support, however. To the contrary, the evidence demonstrates that in 2013 the MRC municipalities delivered only 179,176.75 tons of MSW to the PERC facility. (Application - Appendix C). According to the State Plan, PERC has the capacity to dispose of 304,000 tons of MSW annually (Application - Appendix E, Table 5) and is currently running at near capacity. In 2013, PERC disposed of over 300,000 tons of MSW. Clearly, MRC is not PERC's only source of MSW. Based upon those numbers alone, PERC's post-2018 closure seems unlikely.

Additionally, MRC acknowledges that not all 187 of its member entities are willing, or even likely, to move with them to the proposed facility. According to its Executive Director, Greg Lounder, "it is possible that not all of the member municipalities will necessarily utilize the proposed facility, due to transportation costs, proximity to competing facilities, and other factors." (Letter from Greg Lounder to MDEP, dated May 20, 2014). Obviously, PERC would be one of those competing facilities, further strengthening the position that PERC has every incentive to remain open and operational post-2018.

Parenthetically, residents in attendance at DEP's public meeting, held July 2, 2014, expressed genuine disfavor for the importing of out-of-state waste. PERC confirmed publicly, at its own informational meeting held on June 17, 2014, that the importation of out-of-state waste will likely end at its facility once the power generation demands imposed by the PPA cease and the currently subsidized disposal rates disappear.

This is especially beneficial to the State in multiple ways; one of the largest of those being an extension in the lifetime of the Juniper Ridge Landfill. The current capacity analysis in regards to Juniper Ridge's disposal capacity lifetime as found in the State Plan is 6 years from now. However, this is estimated using the tonnage of waste that PERC is currently disposing of, *which includes out of state waste*. Importantly by not accepting such high tonnage post-2018 the lifetime of Juniper Ridge, where PERC disposes of its residuals, will be *further* extended because PERC will not have nearly as much residual to dispose of as previously estimated by the DEP.

In short, all indications are that PERC will remain operational post-2018 and MRC has failed to prove otherwise by a preponderance of the evidence. Karen Knuuti, Environmental Specialist August 16, 2014 Page 6 of 15

B. The State of Maine has no immediate, short-term, or long-term landfill capacity needs.

Before determining whether MRC's proposal *fulfills* any immediate, short-term, or longterm landfill capacity needs, one must first examine whether there are any such needs. The State's solid waste needs are set forth in the latest *State of Maine Waste Management and Recycling Plan* dated January, 2014 ("State Plan") and the *Solid Waste Generation and Disposal Capacity Report for Calendar Year 2012*, dated January, 2014 ("Capacity Report"), both prepared by the Maine's State Planning Office.

The purpose of the State Plan is to identify the need in the State for current and future solid waste disposal capacity by type of solid waste, including identification of need over the next 5-year, 10-year, and 20-year periods. Title 38 M.R.S.A. § 2123-A(4)(Supp. 2014). The Department has previously interpreted the 5, 10, 20 year time frames to equate to immediate, short-term, and long-term, respectively. We follow the Department's lead in that regard.

Absent from the current version of the State Plan is an expressed need for solid waste disposal capacity. Given that the DEP's duty is to identify need *if there is any*, this omission must be presumed intentional. Indeed, the DEP concludes that the strategies it proposes in the plan are aimed towards, among other things, "[...] extend(ing) the lifespan of Maine's *existing* landfill capacities." (State Plan, Sec. VI)(Emphasis added).

Importantly, the DEP included in the State Plan a table that sets forth the available licensed MSW disposal capacity in the State of Maine through 2032, as well as one that displays the years of remaining lifetime for existing landfills. As demonstrated by these tables, capacity to both process and landfill MSW through 2032- 17 years away- exists in the State of Maine.

Pursuant to M.R.S.A. § 1310-AA (3)(A) substantial public benefit can only be determined if the proposed facility meets immediate, short term, or long-term capacity needs- the long term horizon being defined as 10 years away. As the DEP's own data demonstrates, there is zero demonstrated need for solid waste disposal capacity in the State Plan in the next 10 years.

C. MRC acknowledges that its proposal does not fulfill any immediate landfill capacity needs.

As noted above, the term "immediate" means within three years of the date of filing an Application for Determination of Public Benefit or, in this case, 2017. The State Plan does not show an immediate need for MSW disposal capacity. Furthermore, the existing Waste Disposal Agreements obligate MRC's member municipalities to deliver, and PERC to accept, the MSW generated by the member municipalities. So, not only are there no immediate landfill capacity needs in the State of Maine, MRC would not fulfill those needs if there were. MRC acknowledges these facts in its Application for Public Benefit Determination. (Application, page 2-2).

Karen Knuuti, Environmental Specialist August 16, 2014 Page 7 of 15

D. MRC failed to demonstrate that the proposed increase in landfill capacity attendant to its project meets any *short-term* capacity needs of the State.

As noted above, the term "short-term" means within five years of the date of filing an Application for Determination of Public Benefit or, in this case, 2019.

Regarding short-term need, MRC attempts to use its assumed (but unsubstantiated) closure of PERC as the rationale behind its claim of short-term disposal capacity need. However, as discussed above, the PERC facility will not close in 2018, but will likely remain open and operational with more than sufficient disposal capacity available.

Furthermore, Juniper Ridge has ample space to satisfy the region's short-term disposal needs. According to the State Plan, Juniper Ridge has the capacity to dispose of solid waste through 2021, and Juniper Ridge is not alone in that ability. Norridgewock, Hatch Hill, Bath, Brunswick, Presque Isle, and Tri- Community landfills and Ecomaine and Lewiston WTE plants all have ample solid waste disposal capacity post-2019 and *well beyond*- many into the long-term capacity marker, according to the State Plan.

MRC's claim of short-term disposal capacity need, despite proof to the contrary, reveals MRC's true motivation. As previously expressed, MRC has not demonstrated a public need for a new landfill in the State, but rather only its own desire to be able to *control* a landfill. "Need" and "desire to control" are two entirely different beasts. One is applicable to the review criteria for an Application for Public Benefit Determination; the other, bluntly put, is completely irrelevant.

MRC's driving desire to control its own landfill is evidenced by the lack of due diligence it performed in evaluating the State's existing capacity. MRC apparently made no attempt to reach out to Juniper Ridge before filing the Application to even discuss the possibility of working with Juniper Ridge to dispose of MRC's waste post-2018. We presume that MRC simply did not want to hear about Juniper Ridge's capacity. In its June 30, 2014 letter to the DEP, the Bureau of General Services and NEWSME made clear that they *do* have disposal capacity available, and they would *certainly* be willing to work with MRC to dispose of its solid waste in the short term. Specifically, the Bureau of General Services and NEWSME stated:

Bureau of General Services (BGS) and New England Waste Services of ME, Landfill Operations, LLC (NEWSME) are certainly willing to discuss with the MRC, if they so desire, a modification of the MSW tonnage limit and an expansion of the time period for MSW disposal to the end of the current licensed capacity at JRL in order to address the MRC's short term (5 years) MSW disposal needs from 2019- 2021.

(Bur. Gen. Services/NEWSME letter to DEP, date June 30, 2014).

In its obvious haste to secure its own landfill, MRC has failed to take even the most basic steps to prove a lack of available capacity. Karen Knuuti, Environmental Specialist August 16, 2014 Page 8 of 15

E. MRC failed to demonstrate that the proposed increase in landfill capacity attendant to its project meets the long-term capacity needs of the State.

As noted above, the term "long-term" means within ten years of the date of filing an Application for Determination of Public Benefit or, in this case, 2014.

With respect to the State's long-term capacity needs, MRC merely repeats its argument that "the MRC cannot rely on the disposal capacity associated with the PERC facility after the schedules date for expiration of the Waste Disposal Agreements on March 31, 2018" and that all other facilities with capacity available throughout the State are not options due to varying, undisclosed "factors". (Application, page 2-3)

First, as discussed above, PERC will be an option post-2018 in terms of disposal capacity for the State of Maine and MRC has failed to demonstrate otherwise.

Second, in their June 30, 2014 letter to the DEP, the Bureau of General Services and NEWSME clarified to the DEP that if the MRC were to build a processing facility (or if they did not and elected to remain at PERC), BGS/NEWSME would *still* be willing to work with MRC in regards to its disposal capacity needs for the long term (next 10 years), pending the approval of Juniper Ridge's entire available capacity expansion. Specifically, BGS and NESME stated:

[b]eyond the current licensed capacity, BGS and NEWSME are also working towards an expansion of JRL as was anticipated in the 2004 Operating Services Agreement (OSA) between the state and Casella. The DEP issued a Determination of Environmental Feasibility for a 21.9 million cubic yard expansion of JRL on April 13th, 2007. A Public Benefit Determination Partial Approval (JRL PBD) for a 9.35 cy expansion of JRL was approved by the DEP Commissioner on January 23rd, 2012. *The JRL PBD could be modified to provide for disposal of MRC's long-term (10 years) disposal needs in the JRL expansion. However, no PBD modification would be required to accept residuals from an MRC processing facility that accepts only in state waste in the JRL expansion.*

(Bur. of Gen. Services letter to MDEP, June 30, 2014)(Emphasis added).

Interestingly, MRC has supported this expansion in the past. In so doing, MRC has demonstrated its confidence in the available disposal capacity at Juniper Ridge, as well the feasibility of its use by MRC member municipalities. In his pre-filed direct testimony in connection with Juniper Ridge's Application for Public Benefit Determination, Greg Lounder explicitly stated that "the Casella-PERC contract includes an option for the PERC private partners to arrange disposal service for MSW from Charter Municipalities at the Juniper Ridge Landfill for a *10 year term starting in 2018*." This is a solution so perfect for the situation at hand that it needs be explored deeper by both the MRC and the DEP before any determination regarding MRC's pending application is made.

Karen Knuuti, Environmental Specialist August 16, 2014 Page 9 of 15

Yet, as plainly demonstrated by the Bureau of General Services and NEWSME's letter to the DEP, MRC failed to make the necessary effort to further discuss this potential solution before the filing of its Application for Determination of Public Benefit for an entirely new landfill in the State.

Simply put, MRC has not done its homework when it comes to ruling out all other options for disposal capacity before embarked on its efforts to construct its own landfill. While a new landfill controlled by MRC may be in its best interest, it is not in the State's or the region's. Unfortunately for MRC, the ability to control a landfill is not amongst the review criteria for determining the existence of a substantial public benefit.

II. MRC failed to demonstrate why existing landfills don't work.

The remainder of M.R.S.A. § 1310-AA (3)(A) provides that:

[w]hen evaluating whether a proposed facility meets the capacity needs of the State, the commissioner shall consider relevant local and regional needs as appropriate and the regional nature of the development and use of disposal capacity due to transportation distances and other factors.

A large piece of MRC's argument as to why they desire to construct a new landfill revolves around transportation distances to other landfills around Maine that *do* have remaining capacity, and the potential hurdle that this presents. We agree, reasonably so, that not *every* landfill in the State of Maine is a feasible option for the MRC communities at this time. That being said, there are two large and state owned landfills that do provide to the MRC both the necessary capacity into the future and are centrally located for their member communities. These are Carpenter Ridge Landfill and Juniper Ridge Landfill.

Carpenter Ridge Landfill

Carpenter Ridge Landfill is located in Lincoln, Maine. In its application, MRC chose to exclude Carpenter Ridge from its calculations regarding future solid waste disposal capacity in the State of Maine, even though as according to the State's data, Carpenter Ridge has a projected lifespan of 18 years when developed; far beyond the long term capacity horizon. The fact that the State has chosen not to develop this large but currently untapped capacity is evidence that the DEP has determined that the disposal capacity is simply *not needed* to date. This is further exemplified by the fact that, as according to the state, the current purpose of the landfill is to act as a "safety net" for future development. The untapped potential at Carpenter Ridge fully suits MRC's disposal needs without licensing an entirely new landfill in the State; the license at Carpenter Ridge is current and ready for development.

Furthermore, contrary to MRC's self-serving claims, the location of Carpenter Ridge is entirely economical in terms of travel distances for disposal. MRC states that "the size and Karen Knuuti, Environmental Specialist August 16, 2014 Page 10 of 15

location of Carpenter Ridge Landfill presents transportation challenges that are inconsistent with the MRC service area," but yet produces no evidence to demonstrate it believes this to be so. The fact of the matter is, that Carpenter Ridge is located proximate to both proposed disposal sites, Greenbush and Argyle. Furthermore, from a practical perspective, Carpenter Ridge is located immediately off Interstate 95 and access to the site would not involve trucks travelling over busy town and city roads, as would be the case with both Greenbush and Argyle.

MRC seems to believe that these two areas are located centrally enough within their service area to host a processing facility, and therefore it makes sense that Carpenter Ridge Landfill would also be centrally located enough to act as a disposal site for MRC's processed MSW. What does not make sense, is MRC's request to build an entirely new landfill when Carpenter Ridge is in their backyard- just up the highway with at least 18 years of capacity potential untapped and ready for development.

We understand why transportation distances are and should be an important consideration in the solid waste disposal citing analysis. Economics dictate that towns in the southern part of the State cannot transport waste up north, and vice versa. This is reasonable. However, this is not situation at hand. Regarding MRC's proposal, there is a currently licensed landfill (i.e., Carpenter Ridge) located only 25 miles away from the proposed facilities - not 200 miles.

To accept MRC's argument regarding transportation costs is to insure that the State of Maine will have many more landfills dotting the landscape because every processing facility, transfer station, etc. will elect to have one in their backyard for the sake of convenience. Title 38 M.R.S.A. § 1310-AA (3)(A) is not about convenience, it is about balancing need. In short, 25 miles is not excessive, by any stretch of the imagination.

In appropriate pursuit of the State Plan and the Solid Waste Management Hierarchy, transportation of residual waste to already existing landfills such as Carpenter Ridge is a small expense that need be paid in order to minimize solid waste land disposal impacts on the State and local communities. Maximum diversion of all solid waste is stated repeatedly as a top priority in both the hierarchy and the State Plan.

If decisions regarding the future of solid waste disposal are made based entirely on monetary factors, then the State will not make any substantial progress towards this maximum diversion effort. Responsible solid waste disposal is a costly activity, and need be recognized as such. Only by bearing the true cost of disposing of solid waste will e communities be incentivized to works towards minimum garbage production and maximum material diversion. How is this goal to be achieved if the State encourages bargain disposal approaches through facilitating artificially cheap pricing options? Obviously, MRC's biggest objective is to secure the most favorable bottom line. Unfortunately in terms of waste disposal, the course of action that leads to the lowest bottom line and the course that will most faithfully support the Solid Waste Management Hierarchy and State Plan are not aligned; and it is for this reason, among many, that MRC has failed to satisfy its burden that the proposed solid waste disposal facility meets the criteria of "substantial public benefit."

Karen Knuuti, Environmental Specialist August 16, 2014 Page 11 of 15

Juniper Ridge Landfill

Juniper Ridge Landfill is located in Old Town, Maine and has been operating as the land filling location for PERC's front end and incineration waste for the past 20+ years. First and foremost, this obviously demonstrates that Juniper Ridge's location is practical in terms of MRC's service area, as it has been servicing MRC's communities over two decades with no major transportation issues arising.

MRC excluded the Juniper Ridge Landfill from any post-2018 capacity calculations, justifying the dismissal by inaccurately stating that according to the State Plan "the Juniper Ridge Landfill will reach its capacity in 2017". This is entirely inaccurate. Rather, in accordance with the DEP's data in Appendix E Table 6 of the State Plan (2012), it was calculated that Juniper Ridge had a remaining 9 years of capacity, or 2021. This untapped potential that is available well beyond 2018 and should have been considered in MRC's calculations regarding true solid waste disposal capacity for the future of the State.

Furthermore, in 2012 NEWSME and Casella filed for an expansion of the Juniper Ridge Landfill, asking for expansion approval to gain 21.9 million cubic yards of capacity, with an estimated 20 years of site life. After review of the application and available landfilling capacity around the State, the DEP determined only *partial* approval of this application- allowing for an expansion of just 9.35 million cubic yards, with a lifespan of 8 to 11 years. This Department Order of Partial Approval was delivered on January 31, 2012- only 2 short years ago. After an amendment to the application a finalized Department Order which granted this same partial expansion was issued on December 20, 2013- only a little over a year and a half ago.

According to the DEP's Order, only partial approval was issued because:

[t]he Commissioner finds it reasonable to determine that the full 21.9 million cubic yards of disposal capacity sought by the applicant is not needed to meet the State's immediate, short term, or long term capacity needs.

(Emphasis added).

As determined by the DEP, the State was simply *not* in need of the entirety of the requested extra capacity for land filling in the immediate, short term, or long term time frame. Since state disposal capacity has been utilized predictably since that determination, we fail to comprehend how, out of thin air, an immense statewide need for an entire new landfill could have arisen in such a short time period. And, indeed, it has not.

Furthermore, on June 19, 2014- just a little over a month ago- the operators of the Juniper Ridge Landfill appealed the DEP's decision of only partial approval of the requested capacity to the Board of Environmental Protection ("BEP"). The DEP gave to the BEP for consideration a "Staff Memorandum" and "Staff Recommendation/Draft Board Order." In its memorandum, the DEP stated that "[t]he Department recommends that the Board ... affirm the Department's Karen Knuuti, Environmental Specialist August 16, 2014 Page 12 of 15

decision to approve the disposal of \$1,900 tons of MSW until March 31, 2016 at JRL as contained in Department Order #S-020700-WD-BC-A."

By asking the Board to affirm and move forward with the Department's original decision on the matter of the expansion of Juniper Ridge, the DEP simultaneously and effectively restated and reinforced their faith in their original conviction that there is *not* a need for solid waste disposal capacity in the state of Maine that would warrant the fully requested expansion, as stated in the original Department Order.

The DEP advanced this opinion only a month and a half ago. Undoubtedly it would be in full contradiction of this Department Order to now, only a short while later, determine substantial public benefit resulting from building an *entirely new* landfill.

If the DEP truly finds that more disposal capacity has become necessary in the last month and a half, there is more capacity available for further expansion at the Juniper Ridge Landfill. Importantly, expanding an existing landfill to its full potential before licensing an entirely new landfill would be more in accordance with the priorities of the State Plan, one of which we know to be, as previously stated in this letter, extending the lifespan of Maine's *existing* landfill capacity.

SOLID WASTE MANAGEMENT HIERARCHY

MRC has failed to demonstrate that the proposed facility promotes the solid waste management hierarchy as set out in section 2101 in accordance with Title 38 M.R.S.A § 1310-AA (3)(B).

The only element of MRC's proposed processing facility subject to the Public Benefit Determination is the landfill. Thus, MRC bears the burden to demonstrate that the landfill component promotes the Solid Waste Management Hierarchy in order to secure a favorable determination. MRC, perhaps recognizing its inability to make such a showing, largely ignores the landfill and focuses, instead, on the remaining components of its proposed facility.

MRC concedes as much in its application, acknowledging that it provides detail on the other components of the proposal in order to demonstrate consistency with the State Plan and State of Maine Solid Waste Management Hierarchy." (Application, page 1-1). Setting aside the important fact that the other (non-landfill components) of MRC's proposal are speculative and largely unproven, MRC obviously felt the need to include a discussion of those components because the landfill component, on its own, fails to promote the State's Solid Waste Management Hierarchy, as required.

Similarly, in the section of its Application entitled "Consistency," MRC attempts to demonstrate how and why the landfill is consistent with Solid Waste Management Hierarchy (and State Plan), but that discussion devolves into a vague and irrelevant discussion of MRC's vision for the future as it pertains to the other components of its proposal, not the landfill. MRC Karen Knuuti, Environmental Specialist August 16, 2014 Page 13 of 15

goes into considerable detail regarding its speculative technologies that could conceivably implemented at the processing facility, but little regarding the component at issue (i.e., the landfill).

While MRC's speculative plans make for interesting reading, they are just that . . . speculative plans. MRC provides no assurances that its proposals will ever come to fruition, much less guarantees. The technologies cited, while certainly attention-grabbing and hopeful, are neither certain nor proven. MRC's inability to formally commit to any specific technology is important. Worst case, if none of the technologies pan out, then *all* of the solid waste MRC accepts will be landfilled. Such an outcome is plainly inconsistent with the State's Solid Waste Management Hierarchy. More subtly, because MRC has not committed to any particular technology, it is impossible to consider that technology as satisfying the State's Solid Waste Management Hierarchy, as MRC proposes.

It is the policy of the State to use the order of priority in the hierarchy as a guiding principle in making decisions related to solid waste management. Landfills are the last rung on the hierarchy and, accordingly, must be a disposal method of last resort. For the DEP to determine *substantial* public benefit resulting from a new landfill being constructed before any of the other rungs on the hierarchy have been proven to be satisfied, renders the hierarchy meaningless and is in direct contradiction of Title 30 M.R.S.A. § 2101(1).

Furthermore, MRC's 187 municipal members are currently disposing of their solid waste at PERC's waste-to-energy facility, an incinerator. Under the solid waste hierarchy, incineration is favored *before* land disposal. MRC, however, is looking to force a shutdown of an operating incineration facility and take its municipalities (though as expressed earlier, it is not known who would actually follow) and build a new landfill. Given that there is no supporting evidence at this time that the rest of the processing facility is going to exist, determining substantial public for this application would consequently be supporting moving down the hierarchy-from incineration to land filling-directly contradicting the statutory expectations of the DEP to only determine public benefit when it is in *promotion* of the hierarchy, meaning *advancement* of rank or position.

CONSISTENCY WITH STATE PLAN

MRC has failed to demonstrate that the proposed solid waste disposal facility is consistent with the State Plan, as required by Title 38 M.R.S.A. § 1310-AA (3)(B).

First, as previously noted, it is the landfill component at issue, *not* the balance of MRC's proposed processing facility. Nonetheless, in its Application section on State Plan consistency, MRC opts to focus on the processing facility, generally, and almost completely ignores the landfill. MRC only finds State Plan "consistency" by reference to its "development approach" in Application - Section 1.2, Application - Section 1.2, entitled, "The Planned System for Solid

Karen Knuuti, Environmental Specialist August 16, 2014 Page 14 of 15

Waste Management"- and discusses all of the pieces of their futuristic planned system, not just the landfill (i.e., the only relevant and certain component of the proposed system).

The actuality is that while they paint a rosy picture of the rest of its planned system, there is no proof that it is actually going to exist. MRC should not be able to use its idealistic goals as real evidence of being consistent with the State Plan and the DEP should not consider the MRC's optimistic dreaming as relevant to the public benefit determination process.

Moreover, as expressed above, a role of the State Waste Management Plan is to "identify the need in the State for current and future solid waste disposal capacity by type of solid waste, including identification of need over the next 5-year, 10-year, and 20 year periods." As previously discussed, no need for disposal capacity was identified within the State Plan.

EXISTING FACILITIES IN GREENBUSH

While perhaps irrelevant to MRC's pending Application for Determination of Public Benefit, there is one important and undisputable fact that is important to the residents of Greenbush that has gone unnoticed. That is, when it comes to being a dumping ground for the region's waste, the Town of Greenbush has already done more than its fair share. The Town's position on the proposal is not so much "not in my backyard," but rather, "not in my backyard... . again."

The Town of Greenbush is home to three waste disposal sites. Some active, some inactive. First, Greenbush is home to a low-level radioactive waste site owned and operated by the State of Maine. That radioactive waste disposal site is approximately 3,600 square feet in area and is located on Gould Ridge Road, approximately three-quarters of a mile north of the Scott's Corner. The site was used by the University of Maine for burial of low-level radioactive wastes from 1960 to 1977. The wastes were the result of biological and chemical experiments at the University of Maine. The wastes were buried annually in 19 separate pits in a 40 x 40 foot area. The site was licensed for burial activity through a Nuclear Regulatory Commission Type A license (#18-01475-15 held by the University of Maine. A second disposal site is located on the Cardville Road. This second site is a municipal landfill which was closed in the mid-1990s. The third site is a currently licensed and operating landfill and transfer station located off the East Ridge Road.

In short, not only has Greenbush served the region by hosting the radioactive waste site, it has also largely taken responsibility for its own solid waste disposal needs. It seems patently unfair to, again, call upon the residents of the Town of Greenbush to bear the brunt of the Town's disposal needs. It is telling that, at MRC's request, area towns are writing form letters of support for MRC's project, none of those towns are offering to host the disposal facility. Karen Knuuti, Environmental Specialist August 16, 2014 Page 15 of 15

CONCLUSION

We respectfully request that DEP dismiss MRC's application because Maine law prohibits the processing and approval of new commercial solid waste disposal facilities, including those owned by Regional Associations like MRC. Even if Regional Associations were exempt from the commercial landfill ban, MRC would not so qualify because under 38 M.R.S.A. § 1303-C(24)(B) only those Regional Associations that are organized "for the purpose of owning, constructing or operating a solid waste disposal facility" may do so. MRC is not organized for that purpose.

Should the DEP determine that MRC and its proposed solid waste disposal facility are exempt from the existing commercial landfill ban, the we ask that MRC's Application for Public Benefit Determination be denied because MRC has utterly failed to carry its burden to prove by a preponderance of the evidence that its proposed solid waste disposal facility provides a "substantial public benefit."

Thank you for your consideration. Please let me know if you have any questions or would like further clarification of the Town of Greenbush's position on the Application.

Very truly yours,

FARRELL, ROSENBLATT & RUSSELL

cc: Town of Greenbush Distribution List

Appendix B: Title 38 M.R.S.A. § 2101

Title 38: WATERS AND NAVIGATION Chapter 24: SOLID WASTE MANAGEMENT AND RECYCLING HEADING: PL 1995, C. 465, PT. A, §26 (RPR Subchapter 1: GENERAL PROVISIONS HEADING: PL 1995, C. 465, PT. A, §27 (RPR)

§2101. Solid waste management hierarchy

- 1. **Priorities.** It is the policy of the State to plan for and implement an integrated approach to solid waste management for solid waste generated in this State and solid waste imported into this State, which must be based on the following order of priority:
 - A. Reduction of waste generated at the source, including both amount and toxicity of the waste;
 - B. Reuse of waste;
 - C. Recycling of waste;
 - D. Composting of biodegradable waste;
 - E. Waste processing that reduces the volume of waste needing land disposal, including incineration; and
 - F. Land disposal of waste.

It is the policy of the State to use the order of priority in this subsection as a guiding principle in making decisions related to solid waste management.

2. Waste reduction and diversion. It is the policy of the State to actively promote and encourage waste reduction measures from all sources and maximize waste diversion efforts by encouraging new and expanded uses of solid waste generated in this State as a resource.

Appendix C: Proposed Amendment to Chapter 400: Solid Waste Rules General Provision

N. Solid Waste Management Hierarchy

1. Standards. The purpose and practices of the solid waste facility must be consistent with the State's solid waste management hierarchy set forth in 38 M.R.S.A. §2101, which establishes that it is the policy of the State to actively promote and encourage waste reduction measures and the maximization of waste diversion efforts, and which sets forth an integrated approach to the management of solid waste generated in and imported to the State, based upon the following order of priority:

(a) Reduction of waste generated at the source, including both amount and toxicity of the waste;

(b) Reuse of waste;

(c) Recycling of waste;

(d) Composting of biodegradable waste;

(e) Waste processing that reduces the volume of waste needing land disposal; including incineration; and,

(f) Land disposal of waste.

2. Submissions. The application must include evidence that affirmatively demonstrates that the purpose and practices of the solid waste facility are consistent with the solid waste management hierarchy including, but not limited to:

- (i) Solid waste disposal facility. Notwithstanding the provisions of section 6 of this Chapter, evidence that demonstrates that the waste has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable prior to disposal, in order to maximize the amount of material recycled and reused, and to minimize the amount of waste, including incinerator ash, being land disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or processing programs/efforts that the waste is or will be subject to, and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and a description of ongoing efforts to increase the effectiveness of these programs/efforts.
- (j) Solid waste processing facility subject to the provisions of 06-096 CMR 409(2)(C). Evidence of consistency with the standards of 06-096 CMR 409(2)(C); and, evidence of the feasibility of recycling or processing all proposed waste streams into a fuel, raw material 6-096 DEPARTMENT OF ENVIRONMENTAL PROTECTION Chapter 400: General Provisions- 45 -

substitute or other product in conformance with the applicable provisions of 06-096 CMR 409 and 418.

(k) All other solid waste facilities except composting, beneficial use and agronomic utilization. Evidence that the facility will, to the maximum extent practicable, incorporate into its design and operation, the implementation of reduction, reuse, recycling, and other waste diversion approaches in order to maximize the amount of waste recycled and reused, and minimize the amount of waste disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or other diversion programs that the waste is or will be subject to and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and, a description of ongoing efforts to increase the effectiveness of these programs/efforts.

Appendix D: LD 1483 "An Act To Promote and Enhance State Policy To Preserve and Support Existing Methods of Disposal of Municipal Solid Waste"

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §2124-A, as amended by PL 2011, c. 655, Pt. GG, §31 and affected by §70, is further amended by adding after the 4th paragraph a new paragraph to read:

Beginning on January 1, 2015 and every odd-numbered year thereafter, the report submitted under this section must include an analysis of the solid waste stabilization assessment funds collected pursuant to section 2204-A and disbursed pursuant to section 2201-B and any department recommendations regarding changes to the established levels of per ton assessment and per ton disbursement.

Sec. 2. 38 MRSA §2201, first, as amended by PL 2011, c. 655, Pt. GG, §64 and affected by §70, is further amended to read:

The Maine Solid Waste Management Fund, referred to in this section as the "fund," is established as a nonlapsing fund to support programs administered by the bureau and the Department of Environmental Protection. The fund must be segregated into 2 3 subsidiary accounts. The first subsidiary account, called operations, receives all fees established and received under article 1. The 2nd subsidiary account, called administration, receives all fees established under this article and under Title 36, chapter 719 and all funds recovered by the department as reimbursement for departmental expenses incurred to abate imminent threats to public health, safety and welfare posed by the illegal disposal of solid waste. The 3rd subsidiary account, called solid waste stabilization, receives funds from the solid waste stabilization assessment under section 2204-A; disbursement of funds from the solid waste stabilization account must be in accordance with section 2201-B.

Sec. 3. 38 MRSA §2201-B is enacted to read:

§ 2201-B. Solid waste stabilization account

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Licensed landfill" means a commercial, municipal, regional or state-owned landfill licensed in the State.

B. "Tipping fee" means any fee, rate, toll or other charge that a licensed landfill or a waste processing facility certified under subsection 5 charges for disposal of solid waste from customers.

2. Funds. The department shall deposit solid waste stabilization assessment funds assessed and collected pursuant to section 2204-A in the Maine Solid Waste Management Fund, solid waste stabilization account, referred to in this section as "the account."

3. Funds disbursed. The department shall disburse the funds from the account through periodic payments to municipalities and recycling and composting programs qualified under subsection 4 and located in the State in accordance with this subsection.

A. The department shall calculate the amount of disbursements to be made to each municipality and recycling and composting program qualified under subsection 4 by determining the difference in the weighted average of the tipping fees paid per ton of solid waste to all licensed landfills in the State and the weighted average of the tipping fees paid to all waste processing facilities certified under subsection 5 during the preceding calendar year, as determined by the department pursuant to section 2204-A, multiplied by the number of tons of waste processed by each certified waste processing facility during the same reporting period. Notwithstanding this paragraph, the amount of disbursement may not be less than \$30 per ton.

B. At least annually, the department shall make disbursements to municipalities and recycling and composting programs, or their designated agents, that qualify for reimbursement under subsection 4. Any funds remaining after the annual disbursement must be retained in the account and carried forward to the following year. If the department determines there are sufficient excess funds carried forward in the account, the department may make a downward adjustment in a future assessment calculation.

4. Application for disbursement. In order to qualify for disbursement under this section, a municipality or recycling or composting program, or its designated agent, must apply using forms developed and provided by the department. The application must include satisfactory evidence of the amount of tipping fees paid by the municipality or recycling or composting program, or its designated agent, to a waste processing facility certified under subsection 5 and the total number of tons of solid waste that were transported to that certified waste processing facility during the applicable reporting period.

5. Certification of waste processing facility. In order for a waste processing facility to be certified under this section, the waste processing facility must:

A. Provide satisfactory evidence to the department that it does not have in operational effect a long-term power purchase agreement with a large, investor-

owned transmission and distribution utility as defined in Title 35-A, section 3201, subsection 12 obtained under the United States Public Utilities Regulatory Policies Act of 1978, 16 United States Code, Section 2601 et seq. and that any funds previously generated and held as a result of any such power purchase agreement have been either disbursed to the appropriate municipalities and other interested parties to the agreements or otherwise used or encumbered for future use by the waste processing facility as a maintenance reserve or similar operational reserve; and

B. Provide satisfactory evidence to the department that it processes solid waste in a manner that generates energy and reduces solid waste by an amount equal to at least 80% by volume and 65% by weight.

6. Expenses. The department may retain and use an annual amount equal to 2% of the funds it collects and deposits in the account to pay for operational and administrative expenses incurred in administering the account.

7. Rules. The department shall adopt rules to implement this section. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 4. 38 MRSA §2204-A is enacted to read:

§ 2204-A. Solid waste stabilization assessment

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

- A."Certified waste processing facility" means a waste processing facility in the State certified under section 2201-B, subsection 5.
- B. "Licensed landfill" means a commercial, municipal, regional or state-owned landfill licensed in the State.
- C. "Tipping fee" means any fee, rate, toll or other charge that a licensed landfill or a certified waste processing facility charges for disposal of solid waste from customers.

2. Assessment established. The department shall impose on each licensed landfill a solid waste stabilization assessment on all solid waste, including, but not limited to, household and commercially sourced solid waste and all other material deposited at the licensed landfill.

3. Credit. When determining the amount of an assessment under this section, the department shall give a credit for solid waste that is deposited in a licensed landfill and that is removed within 18 months from that landfill and processed at a certified waste processing facility.

4. Exemption. Solid waste that originates from a source that has an agreement with the State for the disposal of solid waste is exempt from the assessment required under this section.

5. Amount of assessment. The amount of the assessment under this section is determined in accordance with this subsection.

A. The department shall determine the total weighted average of the tipping fees paid to each licensed landfill and the total weighted average of the tipping fees paid to each certified waste processing facility.

B. The assessment is calculated by multiplying the difference between the total weighted averages of the tipping fees determined pursuant to paragraph A by the total annual capacity of all the certified waste processing facilities and dividing that result by the total number of tons of solid waste deposited in all licensed landfills during that same time period, except that, until 2017, the assessment may not be less than \$10 per ton, and beginning in 2017, the assessment may not be less than \$14 per ton.

6. Waste management account. The assessment collected by the department pursuant to this section must be deposited in the solid waste stabilization account of the Maine Solid Waste Management Fund established under section 2201.

7. Rules. The department shall adopt rules to implement this section. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 5. Develop process. The Department of Environmental Protection shall develop a process to maximize the use of existing incineration facilities in the State and increase the amount of Maine-sourced solid waste that is processed at those facilities annually. The department shall report its recommendations, together with any necessary implementing legislation, to the Joint Standing Committee on Energy, Utilities and Technology by January 1, 2014.

Appendix E: M.R.S.A. Section 1310-AA, Public Benefit Determination

Title 38: WATERS AND NAVIGATION Chapter 13: WASTE MANAGEMENT HEADING: PL 1987, C. 517, §4 (RPR) Subchapter 1-A: SOLID WASTE HEADING: PL 1987, C. 517, §25 (NEW) Article 3: SOLID WASTE FACILITY SITING HEADING: PL 1987, C. 517, §25 (NEW)

§1310-AA. Public benefit determination

1. Application for public benefit determination. Prior to submitting an application under section 1310-N for a license for a new or expanded solid waste disposal facility, a person must apply to the commissioner for a determination of whether the proposed facility provides a substantial public benefit.

1-A. Public benefit determination for acceptance by publicly owned solid waste landfills of waste generated out of state. Prior to accepting waste that is not generated within the State, a solid waste facility that is subject to this subsection shall apply to the commissioner for a determination of whether the acceptance of the waste provides a substantial public benefit.

A. A facility is subject to this subsection if the facility is a solid waste landfill that is not a commercial solid waste disposal facility pursuant to:

(1) Section 1303-C, subsection 6, paragraph A-2;

(2) Section 1303-C, subsection 6, paragraph B-2; or

(3) Section 1303-C, subsection 6, paragraph C-2

B. A facility that is subject to this subsection mat not accept waste that is not generated within the State unless the commissioner determines that the acceptance of the waste provides a substantial public benefit.

C. The commissioner shall make the determination of public benefit in accordance with subsections 2 and 3.

D. For purposes of this subsection, "waste that is generated within the State" includes residue and bypass generated by incineration, processing and recycling facilities within the State; waste whether generated within the State or outside of the State used for daily cover, frost protection, or stability in accordance with all applicable rules and licenses; and waste generated within 30 miles of the solid waste disposal facility.

1-B. State-owned solid waste disposal facilities. This subsection applies to public benefit determinations for solid waste disposal facilities owned by the State.

- A. The department may not process or act upon any application for a new, modified, or amended solid waste license for a solid waste disposal facility acquired by the State after January 1, 2007, including an application to expand, until the facility has applied for and received a public benefit determination.
- B. A solid waste disposal facility owned by the State before January 1, 2007 is deemed to hold a public benefit determination for the licensed disposal capacity at the facility on the effective date of this subsection. The department may require the holder of a public benefit determination under this paragraph to submit an application for a modified public benefit determination if the department finds that a material change in the underlying facts or circumstances has occurred or is proposed, including, but not limited to, a change in the disposal capacity or a change of the owner or operator of the facility. The department may not process or act upon any application to expand a solid waste disposal facility owned by the State before January 1, 2007 until the facility has applied for and received a public benefit determination.

2. Process. Determinations by the commissioner under this section are not subject to Title 5, chapter 375, subchapter 4. The applicant shall provide public notice of the filing of an application under this section in accordance with department rules. The department shall accept written public comment during the course of processing the application. In making the determination of whether the facility under subsection 1 or the acceptance of waste that is not generated within the State under subsection 1-A provides a substantial public benefit, the commissioner shall consider the state plan written information submitted in supported of the application and any other written information the commissioner considers relevant. The commissioner shall hold a public meeting in the vicinity of the proposed facility under subsection 1 or the solid waste landfill under subsection 1-A to take public comments and shall consider those comments in making the determination. The commissioner shall issue a decision on the matter within 60 days of receipt of the application. The commissioner shall issue a decision on the matter within 60 days of receipt of the application. The commissioner's decisions under this section may be appealed to the board, but the board is not authorized to assume jurisdiction of a decision under this section.

3. Standards for determination. The commissioner shall find that the proposed facility under subsection 1 or the acceptance of waste that is not generated within the State under subsection 1-A provides a substantial public benefit if the applicant demonstrates to the commissioner that the proposed facility or the acceptance of waste that is not generated within the State:

A. Meets immediate, short-term or long-term capacity needs of the State. For purposes of this paragraph, "immediate" means within the next 3 years, "shortterm" means within the next 5 years and "long-term" means within the next 10 years. When evaluating whether a proposed facility meets the capacity needs of the State, the commissioner shall consider relevant local and regional needs as appropriate and the regional nature of the development and use of disposal capacity due to transportation distances and other factors;

- B. Except for expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling, is consistent with the state waste management and recycling plan and promotes the solid waste management hierarchy as set out in section 2101;
- C. Is not inconsistent with local, regional, or state waste collection, storage, transportation, processing or disposal; and;
- D. For a determination of public benefit under subsection 1-A only, facilitates the operation of a solid waste disposal facility and the operation of that solid waste disposal facility would be precluded or significantly impaired if the waste is not accepted.

3. Application. This section does not apply to facilities described in section 1310-N, subsection 3-A, paragraph A.

5. Modifications. Public benefit determinations may be revised by the department if the department finds that a material change in the underlying facts or circumstances upon which a public benefit determination was based has occurred or is proposed, including, but not limited to, a change related to disposal capacity or a change of the owner or operator of a facility. The department may require the holder of a public benefit determination for modification of that determination if the department finds that a change in the underlying facts or circumstances has occurred or is proposed.

6. Substantial public benefit.

7. Decision making. When making a decision on an application for a determination of public benefit, the commissioner.

A. May issue a full or partial approval of an application, with or without conditions; and

B. For an application related to a state-owned solid waste disposal facility, shall conduct a review that is in accordance with the provisions of this section and is independent of any other contract or agreement between the State and the facility operator or any other party concerning the operation or development of the facility.

Author's Biography

Jamie A. Steven was born in Auburn, Maine on January 23rd, 1993. She was raised in Bethel, Maine, where she attended and graduated as Valedictorian from Telstar Regional High School. At the University of Maine, Jamie has double majored in both Ecology and Environmental Science with a concentration in Sustainability, Environmental Policy, and Natural Resource Management, and Economics. Jamie has minors in both Renewable Energy Policy, as well as the Spanish language. Jamie is a proud sister of Alpha Phi Fraternity, as well as a member of the Order of Omega Honors Society and Omicron Delta Epsilon, an International Economic Honor Society. While at the University she has been president of the Panhellenic Council, and been the recipient of the Panhellenic Woman of the Year award.

Upon graduation Jamie plans to work for a year at Match Charter High School, a high school in Boston for under privileged youth. She then plans to apply to law school to go into the field of Environmental Law.