



**CITY OF
MONTPELIER
MONTPELIER,
VERMONT**

Agenda for City
Council Meeting
Wednesday,
November 28, 2012
06:30 P.M.

- 1) Call to Order by the Mayor
- 2) 12-286. General Business and Appearances
- 3) 12-287. Consideration of the Consent Agenda:
 - a) Approval of Minutes from the November 14, 2012, City Council Meeting.
 - b) Approve the proposal from Wasco Products, Inc. from Wells, Maine, in the amount of \$17,174 for the skylight replacement at the Fire Station.
 - 1) Wasco Products, Inc. is the only manufacturer/vendor in this area. The installer is a Wasco-certified installer from Gray, Maine, and he provides a 10-year warranty.
 - 2) Breakdown of cost: \$9,574 for the 8x10' custom, dual-glazed skylight unit; \$5,800 to remove old unit and install new unit (including crane); \$1,500 to reflash curb; and \$300 for the dumpster.
 - 3) This unit will replace the old, badly deteriorated single-glazed unit with a new, energy efficient one. The old unit is original to the building (1924); the new unit can reasonably be expected to last 40 years or more.
 - 4) This work was recommended in the Capital Needs Assessment Report, funds are available from the Bond proceeds for the CAN work.

- c) Approval for Sue Bette (caterer) to operate a smoker in two city parking spaces in the lot behind 54 Main Street on December 8th, 2012, for the preparation of food to be served at an art opening held inside that address from 5:00 P.M. to 8:00 P.M. that day.
 - d) Approval of the City remaining with the BlueCross Blue Shield's CDHP Blue Consumer Directed Health Plan \$4,000/\$8,000, and accepting the 15% premium increase cap. After meeting with the City's broker, VLCT Health Trust representatives and members of the City Employee Health Task Force, the City's Finance Director is making this recommendation "as the best option for the City and its employees"
 - e) Payroll and Bills
- 4) 12-288. Update from Mia Moore, the City's representative to the Central Vermont Solid Waste Management District.
- a) Ms. Moore will begin by providing Council with some program highlights from the district for the past year.
 - b) Following that, she would like to open up the conversation with Council for requests/feedback as to what the District can do to help the City with implementation of Act 148.
 - c) 'Act 148 Barb's Proof' is a summary of the legislation, with effective dates. The 'Draft Materials Management Plan' is what the Vermont Agency of Natural Resources has put together to plan for implementation of Act 148; both documents are attached.
 - d) Recommendation: Receive update; discussion of the 'Act 148 Barb's Proof' and the 'Draft Materials Management Plan'; possible direction to Mia Moore and/or staff.
- 5) 12-289. District Heat Bids
- a) The City received two bids on November 5th for the District Heat Project.
 - b) The low bidder was Kingsbury Construction from Waitsfield, Vermont, at

\$3,436,396 for District Heat work; \$752,518 for service laterals to be paid by customers; \$737,660 for Union Elementary School conversion; and \$260,480 for water system improvements.

- c) Bid prices fall within the project budget and available funds. Water system work will be done as funds are identified. Union School work will be done when authorized by the School Board.
- d) Recommendation: Authorize the City Manager to sign contracts and necessary change orders with Kingsbury Construction consistent with bid prices and project funding.

7) 12-291. Reports by City Council

6) 12-290. Update on Public Safety

- a) As outlined in the City of Montpelier's FY '14 Budget Schedule (July 1, 2013 - June 30, 2014), Reports from City Departments are scheduled to be heard this evening.
- b) Reports from City Departments: The Police Chief and the Fire Chief will be presenting this evening.
- c) Update on Regional Public Safety: The Regional Public Safety Committee recently presented a report outlining a potential four-community structure for delivery of Police, Fire, EMS and Dispatching services.
- d) Recommendation: Receive reports from the Police Chief and the Fire Chief; receive update on Regional Public Safety; discussion; possible direction to staff.

7) 12-291. Reports by City Council

8) 12-292. Mayor's Report

9) 12-293. Report by the City Clerk

10) 12-294. Status Reports by the City Manager

11) 12-295. Agenda Reports by the City Manager

Adjournment



City of Montpelier, Vermont
"The Smallest Capital City in the United States"

TO: William Fraser, City Manager

FROM: Sandy Gallup, Finance Director

DATE: November 21, 2012

SUBJECT: City Employee Health Insurance Program - 2013

Last year the City Employee Health Insurance Task Force recommended moving the City's employee health insurance plan to BlueCross BlueShield's CDHP Blue Consumer Directed Health Plan \$4000/\$8000 effective January 1, 2012. This plan provided comparable coverage to our employees with very small increases in costs in 2012. When we were negotiating this move to BCBS, we asked for and received a 15% rate increase cap for the second year (2013) of this program. We are very fortunate to have this agreement with BCBS. Without this cap we would be facing a \$27.1% increase in premium in 2013 (based on our first year claims, the mandated enhancements to insurance coverage and new federal/state taxes).

After meeting with our insurance broker, VLCT Health Trust representatives and members of the City Employee Health Task Force, I recommend remaining with the BlueCross BlueShield's CDHP Blue Consumer Directed Health Plan \$4000/\$8000 and accepting the 15% premium increase cap. This is the best option for the City and its employees. Similar (or larger) increases are occurring in other large municipalities across the state.



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Adjournment

**Minutes of the Montpelier City Council Meeting
November 14, 2012
City Council Chambers, Montpelier City Hall**

In attendance: Mayor John Hollar (presiding), City Manager Bill Fraser, City Councilors Andy Hooper, Thierry Guerlain, Alan Weiss, Anne Watson, and Tom Golonka. Assistant City Clerk Crystal Chase acted as Secretary of the Meeting. Councilor Angela Timpone was not in attendance.

Mayor Hollar called the meeting to order at 6:30PM.

12-276. Resident Barney Bloom offered an analogy in response to the article in the newspaper regarding the Planning & Development office. He stated that the Planning & Development offices are like the Engine and the Steering Wheel, and it is necessary for them to work together to produce movement in the right direction.

12-277. Councilor Guerlain moved approval of the consent agenda, seconded by Councilor Watson. Councilor Weiss asked to remove item (F) for special consideration. Consent Agenda was passed with the removal of item (f) on a unanimous vote at 6:35PM.

12-278. Mayor Hollar clarified (in response to an article in the newspaper) that he was not opposed to the proposed medical marijuana dispensary in the city.

As a supplement to his memo attached to the agenda, Chief Facos indicated he had called the US Attorney's office to address some general concerns on the matter (e.g. security, burglary, and the safety of staff, patients and caregivers). He said all of his concerns were satisfied and he feels this is the right approach for medical marijuana dispensary.

In response to Councilor Hooper's question, Chief Facos indicated that the plants would be grown inside a secured facility, but the location was not for public disclosure.

Councilor Guerlain noted his disappointment that, because it was for medical purposes, that it could not be dispensed through pharmacies.

12-279. Public Works Director Todd Law went over his memo (a departmental report) included with the agenda.

12-280. The Council began a discussion of the goal to maintain all city streets, bridges, sidewalks and other infrastructure (tennis courts, parks, rec paths, etc.) in (at minimum) fair or good condition as per appropriate rating indices.

Councilor Guerlain noted that the committee consisted of himself, Councilors Hooper and Timpone. They also received help from finance director Sandy Gallup, Public Works Department representatives Todd Law and Tom McArdle, and City Manager

Fraser.

Councilor Guerlain read through his memo “Capital Improvements Projects” (included with agenda). He noted that looking at the two scenarios listed it was unlikely for us to add 1 million dollars to our budget. He characterized the plans presented as worthy ones, and projects it all comes down to how quickly we want to implement them and how to fund them.

City Manager Fraser said using the second scenario, they were looking at a 10 year cycle, using the first five years to really ramp up the funds of \$800,000 (noting that we could at 166,000 to the budget for five years which would cause a 2 cent increase on the tax rate).

Councilor Golonka questioned Todd Law about the current staff capacity. Law indicated that they plan to stay at their current staff levels, stating that project management is a big part and proactive planning is key. The City Manager added that they would be spacing the improvements out in 3 year increments and that we would not be adding projects just lengthening them.

Councilor Guerlain agreed, stating that the point is - whether you pave 500 feet or 1,000 feet, it would be the same efforts to get the project going - it would just be an extended time for completion.

Councilor Weiss wanted to point out page 29 title 13 sections 3 of the City’s Charter, noting the provision reserving the city’s power to *“upon notice to the owners of adjoining lands assess the owners of such lands so much of the expense of making such new street or sidewalk or street improvements, or heat improvements, including land damage for new streets, as the city council shall adjudge such lands to be benefited thereby.”* City Manager Fraser said that he had also read that recently but as a matter of policy would not recommend it.

Councilor Guerlain added that he understands these are big numbers (that we are currently not funding), which is why we are seeing the need for all these improvements.

Mayor Hollar asked Todd Law what the cost of the repairs we are making to broken or old lines are in comparison to replacing them with new ones. Law replied that with the computer software they are using they can get an exact amount on what each specific break, leak, or repair cost. He indicated he would provide that data.

Mayor Hollar further asked Mr. Law about one of the suggestions made in the Matrix Report, which would entail moving Law’s office down to the DPW garage on Dog River Rd. Law replied that moving his office to directly supervise the employees at the Dog River facility would not be effective due to the fact that all but 4 employees are on the roads on a daily basis. He also noted that City Hall was a much more accessible location for other department heads as well as citizens.

City Manager Fraser also backed Law’s response, stating that this was an issue discussed about 18 years ago (when he was first hired), and City Hall was thought to be the better

location for the director's office at that time.

Mayor Hollar asked about creating a citizens committee to look at the sidewalks and public walk ways. Mr. Law indicated that they already have a volunteer group going out to assess sidewalks and looking for trip hazards.

The Mayor asked about the status of the removal process for the dual utility poles. Law responded that Tom McArdle was in contact with Fairpoint and that Fairpoint had been very responsive. A schedule and plan for removal was in development.

Councilor Guerlain questioned the need for the fire alarm pull boxes that are situated around town and the possibility of getting rid of those to save money. City Manager Fraser said that they were already in the process but the maintenance expense was minimal.

- 12-281. Councilor Golonka reminded people of the four-town regional public safety committee meeting taking place tomorrow night at 7pm.

Councilor Watson reminded the council that the Vermont Comprehensive Energy meeting is also taking place tomorrow night and that the committee voted to participate in the efficient Vermont weatherization challenge.

Councilor Guerlain reported that the Union School annual Thanksgiving luncheon was today and was a great event!

Councilor Hooper noted that he thought the CIP committee had a great fresh approach and was satisfied.

- 12-282. Mayor Hollar reported that the Bike Summit event was a great success with around 70 people attending with lots of enthusiasm.

- 12-283. Assistant City Clerk Chase reminded people that the Property Tax payments were due on the following day (November 15).

- 12-284. City Manager Fraser reminded the council that the status of item (F) of the consent agenda was still unresolved. Councilor Weiss asked that the council table the item until the next meeting. Councilor Hooper seconded the motion, which passed unanimously at 8:02PM.

Councilor Hooper moved for adjournment. Councilor Guerlain seconded. The motion passed unanimously at 8:07PM.

ACT 148 (H. 485)

LANDFILL BANS

2015 Mandated Recyclables
2016 Leaf and Yard residuals
2016 Clean Wood Waste
2020 Food Waste*

FACILITIES MANDATES

Facility owners that collect trash must also collect

2014 Mandated Recyclables
2015 Leaf and Yard Waste
2017 Food Waste

CURBSIDE COLLECTION MANDATES

2015 Mandated Recyclables
2016 Leaf and yard waste
2017 Food Waste

***TIME FRAME FOR FOOD WASTE PHASE IN**

2014 104 tons per year, within 20 miles of a facility
2015 52 tons per year, within 20 miles of a facility
2016 26 tons per year, within 20 miles of a facility
2017 18 tons per year, within 20 miles of a facility
2020 All food waste including households must be diverted with no provision for distance

OTHER

- Authorizes enforcement authority to ANR relating to municipalities and solid waste districts adopting and implementing SWIPs consistent with the state plan.
- Requires ANR to revise the state plan November 2013.
- Districts may need to revise their plans to be consistent with the state plan following November 2013

DRAFT VERMONT MATERIALS MANAGEMENT PLAN

November 8, 2012

Although progress has been made in managing solid waste since the 1987 passage of Act 78, the amount of solid waste that Vermonters generate has increased over time while the solid waste diversion rate has stagnated. Vermont's Agency of Natural Resources (ANR) is promoting a new strategy designed to improve solid waste management in the state. This strategy, referred to as *sustainable materials management*, focuses on using and reusing the resources exploited during the entire lifecycle of a product in the most productive way possible. The benefits of managing materials sustainably will extend beyond the field of solid waste to influence the economy (e.g. creating jobs and developing businesses), and the environment (e.g. reducing greenhouse gas [GHG] emissions and fossil fuel use).

Act 148, an "act relating to establishing universal recycling of solid waste," passed into Vermont law in 2012. The law requires mandatory recycling and organics collection services to be phased in over time. During the next several years, the law will require waste haulers to provide parallel curbside collection of mandatory recyclables, the collection of leaf and yard residuals as well as food scraps. In due course, it prohibits the disposal of recyclable and certain organic materials in landfills. The law also requires the collection of recyclables parallel to trash in public buildings, including the Vermont State House. By July 1, 2015, the solid waste management entities of Vermont are required to implement variable rate pricing, a system that charges based on the volume or weight of the waste collected.

In addition, Act 148 requires ANR to conduct analyses and make recommendations to the legislature at the beginning of each biennium regarding the volume, amount and toxicity of the waste stream. Widely recognized as progressive, Act 148 makes every effort – e.g. utilizing bans and mandates, evaluating deposit legislation, considering Extended Producer Responsibility – to reduce the amount of hazardous material, non-recyclable and non-biodegradable material disposed by Vermonters.

VISION

The vision which is the basis of Vermont's MMP is:

*To prevent waste from being generated,
To promote sustainable materials management, with a preference for higher and best use,
To minimize reliance on waste disposal, and
To minimize energy consumption, green house gas emissions and other adverse environmental impacts.*

Prevent waste from being generated. This can be accomplished through better product design, heightened producer and consumer responsibility, and improved awareness of material reduction and reuse options. ANR can influence this trend by creating incentives for improved design and manufacturing of products with a goal towards producing less, and for using materials which can be reclaimed and reused. While everyone contributes to waste generation, when individuals are better informed and have convenient options, they are able to make better choices in their purchases as well as managing materials when done using them.

Promote sustainable materials management, with a preference for higher and best use. Vermonters must change their thinking about waste and materials management. Rather than looking at products only from an "end-of-life" perspective, it is important to shift thinking toward a 'life cycle' approach. A greater reduction in waste generation can be realized by expanding our efforts to include the resources and processes that go into the creation of a product, as well as the product itself. This includes considering the environmental impacts throughout the life of a product which can result in a reduction of raw material extraction, and a reduction of adverse impacts on the environment, energy consumption, and related economic factors.

Minimize reliance on waste disposal. Disposal of materials as waste is an indication of an inefficient management system. Disposal is increasingly recognized as environmentally problematic and is a misuse of natural

resources. Beyond global impacts, disposal facilities have a finite lifespan, and developing additional disposal capacity is becoming more difficult. Yet, almost 25 years after developing a hierarchy that emphasizes waste reduction, reuse, and recycling, Vermonters continue to throw away nearly 400,000 tons of materials per year (Vermont Diversion & Disposal Report 2010).

Minimize energy consumption, GHG emissions and other adverse environmental impacts. The benefits of preventing waste go beyond the State's goals of reducing waste generation and toxicity. Waste prevention helps to meet other State goals of reducing energy use and GHG emissions by decreasing the extraction of natural resources and reducing energy used in the manufacturing, distribution, and sale of products. Less consumption of resources reduces the entire burden on the ecosystem. Land, soil, and water are conserved, and the air is less impacted by emissions.

This document – the Materials Management Plan (MMP) – includes recommendations from three reports regarding Vermont solid waste that were written in the past four years. These reports include: ANR Solid Waste Report to the State Legislature [2008]; Life Beyond Garbage: Vermont Waste Prevention and Diversion Strategies [2008]; and the Solid Waste Working Group Report to the Vermont Legislature [2009].

PRIORITIES:

The following priorities are also incorporated into the MMP:

- product stewardship
- reduction in statewide disposal rate (pounds/person/year)
- improvement of waste reduction and diversion
- the reuse and recycling of materials to reduce the volume remaining for processing and disposal
- reduction of toxicity in the waste stream
- improvement in statewide infrastructure and services (strive for convenient, consistent and cost-effective services)
- improvement of the measurement of progress and inclusion of performance standards
- development of sustainable financial structure to manage materials

Finally, ANR recognizes the importance of partnerships between agencies, industry, local communities and stakeholders. Maintenance of existing partnerships, as well as fostering new partnerships, is a theme integrated throughout the MMP.

PLAN STRUCTURE

The MMP is organized in two sections: General and Material Specific. The General section identifies the overarching goals and action items for sustainably managing materials in Vermont. The Material Specific section is further broken down into five chapters that focus on material streams recognized by the Vermont legislature to be of vital importance. These material types include: Recyclables, Packaging and Printed Materials; Organics; Construction and Demolition Materials; HHW, CEG, E-Waste and Toxics; and Sludge, Septage and Miscellaneous Residual Wastes.

Recommended actions are presented within the framework of six identified categories:

1. Public Outreach and Education
2. Product Stewardship
3. Government Leadership
4. Infrastructural Improvements
5. Mandates and Disposal Bans
6. Performance Standards

GENERAL: MATERIALS MANAGEMENT IN ACTION

While there has been significant progress in the management of disposed materials in Vermont since the passage of Act 78, it is clear that more must be achieved. The purpose of the MMP is to provide a framework for the State and its citizens to:

- Prevent waste from being generated, and
- Expand reuse and recycling efforts

to attain Vermont's statewide goals.

Specifically, the MMP outlines the programs and services that will guide the reduction in the amount, and toxicity of solid waste in Vermont. Clear and definitive performance standards for both the state and municipal waste management entities will provide benchmarks to measure progress toward achieving Plan goals.

Public Education and Outreach

Education and outreach are essential aspects of a solid waste management program to ensure understanding and support of new or existing programs. Education and outreach efforts will supply essential information that consumers and businesses need to make environmentally responsible choices in their daily lives. The campaign will consist of two parts: education in schools and outreach to the general public. ANR will:

1. Educate and engage citizens about the benefits of waste reduction and sustainable materials management. To accomplish this, ANR will work to develop partnerships with public and private organizations to launch aggressive public education campaigns to:
 - a. Influence the behavior of consumers and businesses, and
 - b. Improve awareness of solid waste services.
2. Conduct sector-specific outreach and training.

ANR will partner with solid waste management entities to offer elementary and secondary education programs designed to provide age-appropriate information and concepts on materials management and environmental awareness in Vermont schools. This will include teacher assistance on incorporating sustainable materials management into their educational units. Additionally, solid waste management entities will provide technical assistance to set up, or expand waste diversion programs for each school within their jurisdiction.

Product Stewardship

A critical tool in waste reduction, reuse, and recycling programs is product stewardship. Product stewardship is “. . . a policy that ensures that all those involved in the lifecycle of a product share responsibility for reducing its health and environmental impacts, with producers bearing primary financial responsibility.” (Product Stewardship Institute Index page. Product Stewardship Institute Inc., 2012. Accessed 30 January 2012.)

Shifting the responsibility of end-of-life management of a product from the consumer to the producer can encourage an interest in designing products so materials can be recaptured and reused to make new products. This “cradle-to-cradle” process significantly reduces waste generation while simultaneously diverting value-retained materials for reprocessing.

1. ANR will promote product stewardship as a priority of sustainable materials management. The intent is to nurture a shift in the waste management system from being consumer- and government-financed to one that places greater emphasis on producers to drive environmentally sound product design.

2. ANR will support Extended Producer Responsibility Legislative Framework to streamline the development and process of product materials management programs. This will include simplifying and standardizing both the manner by which appropriate products are identified for extended producer responsibility, and the design structure of programs.

Government Leadership

Government's role in materials management is indispensable in driving proper stewardship of the environment. It is important that state and local government agencies lead by example and implement the sustainable materials management strategies that are promoted within the MMP. Additionally, ANR proposes several steps to remove unnecessary barriers and streamline procedures for solid waste management entities, institutions, businesses and individuals that are sustainably managing materials. These steps include:

1. Reviewing Vermont statutes relevant to materials management. The objective is to suggest revisions to reflect the evolved strategy of managing materials in Vermont. The passage of Act 148 was an early success of this idea. Act 148 increases expectations and requirements for aggressive materials management that will decrease the amount of waste being disposed, and improve the rate of diversion of valuable materials from landfills.
2. Proposing a simplified, yet more meaningful process by which solid waste management entities report to ANR. A key element will be the documentation of the performance standards identified in this MMP, as well as the requirements of Act 148.
3. Exploring financial incentives that will promote the development of materials management infrastructure and services. Funding priorities will include programs, new projects, and upgrades to existing facilities that further the objectives of the plan.
4. Reviewing the Environmentally Preferable Purchasing programs established by the Division of Purchasing & Contract Administration and providing suggestions to improve outdated aspects.
5. Participating in discussions involving Climate Change and Greenhouse Gas (GHG) reductions. A systems view of materials management – from resource extraction, to manufacturing, transportation, use, and to end-of-life – will be proposed. A key issue will be the link between disposed materials and GHG emissions. Life-Cycle Assessment (LCA) models will be used to compare GHG emissions reductions from different management practices. Federal government and numerous States have contracted for LCAs to be completed that are both generic for industry, as well as those that are material specific. Data from these models will be used to explore management options for materials commonly found in Vermont's waste stream. Attention will be given to potential GHG reduction and avoidance opportunities at the state and local level.
6. Promoting the development, and use, of a statewide Disaster Debris Management Plan. Disaster Debris Response Plans should be developed by solid waste management entities, in conjunction with regional planning commissions or municipalities. The plans would identify resource availability and proximity, explore mutual aid agreements, and assess the feasibility of identifying pre-qualified disaster debris management contractors in the event of a disaster. Local staging areas, especially for woody debris, should also be identified and included in local plans.
7. Investigating the feasibility of adopting a servicizing policy. Servicizing is a business model in which the functionality or service of a product is sold, rather than the product itself. Examples of servicizing include car share services (similar to CarShare Vermont), that provide access to reliable vehicles without the requirement for the user to maintain its operational status, car payments, registration, or insurance.

Infrastructure Improvements

Successful materials management in Vermont is contingent upon an infrastructure that can support consistent services throughout the state. ANR is committed to ensuring all Vermonters have safe, consistent, convenient, and cost-effective options for materials management.

1. With emphasis on increasing reuse and recycling, ANR will work with solid waste management entities to improve consistent access to key services across the state. As required by Act 148, a comprehensive state-wide review will be conducted to identify existing and proposed materials management infrastructure and to assess the capacity of this infrastructure for the current and projected populations of Vermont communities. Recommendations for additional infrastructure needs will be made based on this review.
2. Economic incentives will be explored; by creating incentives, market demand may stimulate development of infrastructure with load capacities able to handle increases in diverted materials.
3. As a requirement of Act 148, ANR will evaluate the current institutional structure throughout the state, and make recommendations for changes that best serve the state in directing and managing a sustainable materials future.

Mandates and Disposal Bans

Mandates and disposal bans can drive an economy to reuse and recycle discarded materials, and to ensure that resources are not wasted. Act 148 advances Vermont to the forefront of the sustainable materials management field by banning the disposal of several material types over the next few years, and mandating the collection services for said materials. Mandatory programs at the point of collection and material bans go hand-in-hand in minimizing disposal of specific materials. If disposal bans are utilized to prevent a type of material from being discarded to the landfill, then point of collection programs must be in place to accommodate the separated materials. ANR will continue to advocate for this approach for other materials that comprise a large portion of the waste stream, and those that are toxic. ANR will:

1. Provide recommendations to prepare for, develop, and implement mandatory programs and disposal bans.
2. Establish a standardized method of data collection of waste in Vermont. In order to improve programs and services, data must be collected and analyzed. ANR currently requires data collection of certified facilities and provides analysis to assess the effectiveness of materials management throughout the state. To facilitate this, Vermont's Solid Waste Program has launched Re-TRAC Connect, a web-based data management software package (Emerge Knowledge, 2012) that will standardize and streamline the collection, organization, and analysis of data collected from Vermont's solid waste facilities.
3. Provide guidance for variable rate pricing (commonly called Pay As You Throw (PAYT); or, \$ave As You Recycle) that solid waste management entities must put into place by July 1, 2015 (Act 148). This materials management method links the actual costs for waste disposal to individual waste production. Standards include price of disposal increases based on volume or weight as the amount exceeds a pre-designated quantity. Rates charged must reflect the cost of managing the program. Tax subsidies may not be utilized to offset program costs, as this may 'mask' actual costs and result in a dilution of the financial incentive for which this program is designed.
4. Solid Waste Implementation Plan (SWIP) Review - Pursuant to 10 V.S.A. § 6604, ANR shall publish and adopt a waste management plan that sets forth a comprehensive state wide strategy for the management of waste. Subsequently, Vermont municipalities, either individually or as part of a solid waste district, or an inter-municipal association, are required to adopt a SWIP. SWIPs document the municipalities waste management facilities and services and articulate how discarded materials will be managed. ANR has established statewide solid waste management goals and performance standards which are contained in the MMP. Individual SWIPs must be consistent with this Plan as they relate to state goals and performance

standards and describe how each of the performance standards will be met. Municipalities and Districts will be expected to prepare and obtain approval of a SWIP within 12 months of the adoption of the MMP. ANR will provide guidance on how to prepare a SWIP. SWIPs approved under the 2006 Vermont Solid Waste Management Plan must be revised to conform to the MMP.

Performance Standards – General

Vermont will be able to move beyond good intentions and toward genuine progress by developing a clear set of expectations of the parties involved in waste management. Having demonstrable requirements will facilitate the achievement of goals identified in the MMP. These *performance standards* were created with explicit legislative authority as established in Act 148, and are defined at the end of each material chapter. The standards will not measure progress on every activity outlined in this MMP, but instead ensure progress through indicator measurements that integrate many of these activities.

To be effective, solid waste services need to be consistent throughout the state, convenient to users, and cost-effective. In addition, there must be an increased awareness of the services, via public outreach. As such, the standards set forth in this MMP will evaluate advancement in these two key cumulative measures (convenience and outreach) by both the state and the solid waste management entities (i.e., districts, alliances, and independent towns) to provide an indicator of overall progress.

The overall effectiveness of the programs and services in this plan will be determined by evaluating the degree to which each statewide goal was met. The main objective of this evaluation is to inform the next 5-year state plan. Both positive and negative results can provide essential feedback on the plan's efficiency, effectiveness and performance that can direct improvement in next plan. Additionally, progress by ANR will be measured on specific elements of education and outreach, and convenience that occur at the statewide level.

The solid waste management entities will be responsible for meeting a set of standards that measure actions applied at a local level. Failure by the entities to meet the standards may result in a determination that a solid waste management entity is not in conformance with the MMP. Solid waste management entities found to not be in conformance face consequences that include:

- a. The loss of grant eligibility,
- b. Preclusion to secure solid waste management facility certification, and
- c. A requirement to manage all waste out of state.

State-level Standards:	Deliverable	
STATEWIDE GOAL		
Vermont will reduce the disposal rate of municipal solid waste (MSW) by 35% from 381,971 tons to approximately 248,000 tons by end of the MMP term. The per capita disposal rate of MSW will be reduced from the current 3.34 lbs per person per day to 2.17 lbs per person per day. This will be achieved through a variety of new and existing efforts designed to educate and to offer services to Vermont citizens and organizations in the proper management of materials. These programs and efforts form the basis of the General and subsequent Materials Specific Sections.	The disposal and diversion rates of solid waste are posted annually on the Solid Waste Program website.	
Education and Outreach	ANR will advertise the MMP by: • Posting it on the Vermont’s Waste Management Division website within a month of being adopted. • Submitting one newspaper article or op-ed piece to a regional newspaper/publication within a month of being adopted, introducing the MMP and how it affects individuals and businesses in the state.	Description and assessment of the outreach programs will be documented in the required biannual report to the legislature.
	Within the first year, ANR will implement a state-wide public outreach campaign to inform the residents and businesses of the best management practices for materials management. This will include information about the impending mandates and bans.	
	Within the first year, ANR will identify best practices in current school programs, and develop training tools and educational resources for a statewide education plan.	Compendium of resources to be provided to all solid waste management entities.
	ANR will present a model program to guide entities in the mandated development of a variable rate pricing system.	Model will be included as an appendix in the MMP.

Solid Waste Management Entity-level Standards:	Deliverable to ANR
Solid Waste Implementation Plan	Vermont municipalities, either individually or as part of a solid waste district or an inter-municipal association, are required to adopt an approved SWIP within 12 months of the promulgation of the MMP. SWIPs document facilities and articulate how solid waste will be managed. SWIPs must be consistent with the MMP in overall planning expectations, the state goals, and performance standards. Revised SWIP to reflect the expectations and standards set forth in the MMP.
Education and Outreach	Within a year of the adoption of the MMP, each entity will post their SWIP on website. Link to website Within a year of the adoption of the MMP, each entity will submit one newspaper article or op-ed piece to local newspaper introducing their SWIP, and how it affects individuals and businesses in entity jurisdiction. Electronic or scanned copies of article. Within the first year, each entity will conduct a survey of constituents on current knowledge; include PAYT, recycling, organics, C&D, toxics. Conduct the same survey during the last year of the plan term and assess outcomes. Survey results. Each entity will hold 2 public meetings during the MMP term to get feedback on new and existing programs; the first meeting must be held before the end of the second year of the plan term, the second meeting in the fifth year. Electronic copies of sign-in sheets; list of questions and concerns addressed at meeting. Each entity will implement a public outreach campaign within the first year to inform the residents and businesses of their jurisdiction of the best management practices for materials management. Include information about the impending mandates and bans. Provide copy of outreach materials, mailing lists to ANR. Each entity will develop and maintain a webpage that lists regional disposal options for waste materials (A through Z). This webpage must be published within the first year, and remain up-to-date throughout the term of the plan. Link to webpage.
Convenience	In accordance with statute, adopt and implement variable rate pricing for MSW from residential customers Description of program

MATERIAL-SPECIFIC MANAGEMENT IN ACTION

CHAPTER 1: RECYCLABLES, PACKAGING, and PRINTED MATERIALS

Although recycling is third in the order of importance according to the classic waste hierarchy (i.e. reduce, reuse, recycle), it remains a key component of materials management. Recycling products and packaging has many benefits, including:

- Conservation of limited natural resources,
- Reduction in greenhouse gas (GHG) emissions by minimizing extraction, processing, and transportation of raw materials,
- Decrease in energy consumption,
- Reduction in landfilling and incineration, and
- Financial gain from selling recyclables as commodities.

Public Education and Outreach

A perception of inconvenience and lack of knowledge in the general population of what is recyclable has been identified as key barriers to recycling. Improving the communication of what can and cannot be recycled is essential to increasing the participation rate. Education and outreach may begin in our schools but the value and importance of these efforts extends to other sectors. Waste prevention relies on an informed citizenry to be successful. The general public and businesses need simple and consistent information about why waste prevention is important and how to actually go about achieving it. Outreach, education, and technical assistance are the cornerstones of effective waste prevention. To accomplish this,

1. ANR will collaborate with other groups and agencies to develop a recycling program for schools throughout the state.
 - a. Tools and resources will be developed for teachers to impart the fundamentals of waste management at home, school, and on-the-go.
 - b. The solid waste management entities will provide assistance as needed in the establishment and maintenance of a school-wide recycling program. A program shall include:
 - i. A designated Recycling Advisory Committee. The group will be comprised of students, teachers and parents that make decisions and recommendations for the school recycling program.
 - ii. A written policy stating the commitment to a school-wide recycling program. This should include school-specific goals for increased rates of diversion, and reduced rates of consumption and disposal.
 - iii. A method of tracking waste diversion.
2. ANR will continue to look for opportunities to educate and inform the commercial sector and the general public about the benefits of recycling. Efforts will target sector-specific generators, and will be performed by the solid waste management entities and other associations.
3. ANR supports all efforts to promote recycling away from home. While travelling, no matter where one goes, whether to public facilities, rest areas, gas stations, parks, sporting or special events, it is important to recycle just as at home. Solid waste management entities will address this particular aspect of recycling by working to educate consumers, businesses and organizers the benefits of recycling away from home.

4. ANR has initiated a “Recycling On-The-Go” program to encourage recycling at events. ANR proposes to purchase 20 portable recycling containers (60 to 90 gallon totes), to be made available for loan to individuals and groups to offer recycling at public or private events. Additionally, solid waste management entities will provide free technical assistance in developing a Materials Management Reduction and Diversion Event Plan to decrease waste generation and disposal.

Product Stewardship

Product stewardship has historically targeted products with hazardous components. However, there is a trend to expand extended producer responsibility laws to non-hazardous products. ANR will:

1. Carefully consider the requirements and costs of proposed programs.
 - a. **Bottle Bill.** Vermont’s Bottle Bill was enacted in 1972 to curb litter. Its sustained efforts boast a recovery rate of 84% (DSM, 2007). However, with the maturation of curbside and drop-off recycling programs in the United States, the efficiency of the Bottle Bill has continually been questioned. During the legislative sessions, Vermont’s deposit system was taken to legislative review with two opposing bills: one in 2010 to repeal it (H.696), and a second in 2011 to expand it (S.21, H.74). Neither bill passed.
 - b. **Packaging and Printed Materials.** An Extended Producer Responsibility Bill (H.218) was introduced in the 2011 legislative session to require producers of packaging and printed material to develop a comprehensive program to develop, implement, and fund a program to expand the collection and recycling of such material. The bill did not pass.

The efficiency of the current Bottle Bill, and any proposed amendments or replacements to the current program will be included in the infrastructure and economic evaluation that ANR is required to complete. Additionally, ANR will consider the advantages and disadvantages of an Extended Producer Responsibility bill focusing on packaging and printed materials. These evaluations will be documented and made available to the public.

2. Evaluate product stewardship for several individual product categories. Targeted products will be determined through internal research and feedback from stakeholders.

Government Leadership

Each state agency, in cooperation with the Department of Buildings and General Services (BGS) and with assistance from the Waste Management Division, will continue and enhance programs for the collection of all recyclable materials generated in state offices and institutions. A clear and consistent recycling infrastructure will be established throughout state buildings to increase and sustain recycling rates. A strong demonstration of ‘lead by example’ will reside in achieving rates that are higher than the state wide average.

1. Several factors influence the success of a recycling program, including the placement of bins at ANR’s new office space. Fewer trash containers will be distributed throughout work spaces while recycling bins will be placed with greater frequency and a wider distribution. The goal is to have many more options to recycle rather than to dispose of waste. This will result in increased recycling rates, reduced amounts of waste generated, and a reduction in the habit of using disposable materials. Once the effectiveness of this pilot has been demonstrated, ANR will work with BGS to promote this system in other state office buildings.
2. Inconsistency in recycling messages and practices results in confusion and indifference therefore causing mistakes, contamination, and low capture rates. Standardization of bins and bin labels in all state buildings can greatly enhance awareness and reduce confusion. ANR will coordinate with BGS to evaluate and

complete this effort in time to meet the legislative requirement to provide parallel collection in public buildings or on public land by July 1, 2015 (Act 148).

3. ANR will coordinate with BGS to evaluate the efficiency of two different collection programs in state offices: single stream and separated recyclables. Cost, contamination, and diversion rates will be key factors in consideration.
4. Revenue generated from recycled materials should be reinvested to expand and improve recycling programs in state buildings.
5. ANR will work with state purchasing officials to increase the procurement of products with post-consumer recycled material (i.e., to 'close the loop') when the option is available.
6. Establish convenient recycling opportunities in all public spaces on state owned lands.

Infrastructure Improvements

Increasing recycling rates will require improved and additional infrastructure. Convenience is a major factor in getting businesses and residents to divert waste materials. Priority will be placed on developing recycling opportunities in underserved parts of the state.

1. ANR will perform an inventory of recycling center locations and infrastructure including Material Recovery Facilities, transfer stations, and other opportunities to aggregate recyclables.
2. Existing gaps in current infrastructure will be identified and characterized. ANR will work with solid waste entities, the private sector, haulers, and economic development agencies to address these gaps.
3. ANR will promote available internet databases for materials exchange in Vermont and around New England. Materials exchange databases include the Vermont School and Property Exchange System (SPEX) (<http://www.spexvt.com>), and the Vermont Buildings and General Services Surplus Property website which sells a variety of materials (http://bgs.vermont.gov/business_services/surplus).

Mandates and Disposal Bans

Despite recycling being a permanent part of daily life, the amount of recyclable materials being disposed in Vermont has hovered close to 20% of the residential municipal waste stream for nearly a decade (based on MSW Waste Composition Studies 2001 [statewide], 2006 and 2010 [CSWD]). Traditional recyclables, such as paper, plastic, aluminum, cardboard, and glass, have established or growing markets and have the potential to be recycled well beyond existing levels.

1. Act 148 establishes statewide disposal ban on traditional recyclable materials after July 1, 2015.

This will include:

Aluminum and steel cans; aluminum foil and aluminum pie plates; glass bottles and jars from foods and beverages; polyethylene terephthalate (PET) plastic bottles or jugs; high density polyethylene (HDPE) plastic bottles and jugs; corrugated cardboard; white and colored paper; newspaper; magazines; catalogues; paper mail and envelopes; boxboard; and paper bags.

2. Mandating a parallel system of waste collection. This will require residential curbside collection to include recyclables for no extra fee. Haulers can charge for commercial collection. This option of parallel collection services will also be required at all transfer stations. (10 V.S.A. §6607a (g)(1)(A); 10 V.S.A. §6607a(h); and 10 V.S.A. §6605(j)(1).

Performance Standards - Recyclables, Packaging, and Printed Materials

State-level Standards:		Deliverable
STATEWIDE GOAL		
Vermont will reduce recyclables in the waste stream by 75% by the end of the Plan term. This number reflects the increase in the recycling rate that will result from several actions on “mandated recyclables” that will go into effect over the next few years, but also accounts for the portion of potentially recyclable materials that is NOT included in the definition of “mandated recyclables”.		An analysis of the volume and nature of wastes disposed of in Vermont will be included in the 5-year revision of the MMP.
Education and Outreach	Within the first year, ANR will implement a state-wide public outreach campaign to inform the residents and businesses of the best management practices for recyclable materials, including information about the impending disposal ban of mandatory recyclable materials. Components of this campaign will provide tailored information for sectors with specific recycling issues.	Description and assessment of the outreach programs will be documented in the required biannual report to the legislature.
	Within the first year, ANR will identify best practices in current school recycling programs, and develop training tools and educational resources for a statewide education plan.	Compendium of resources to be provided to all solid waste management entities.
Convenience	Ensure all solid waste facilities offer collection of mandated recyclables by July 1, 2014.	Post on website a list of all services offered 1. At facilities and 2. By curbside collection
	Ensure all haulers offer curbside collection of mandated recyclables by July 1, 2015.	
	Ensure that recycling containers are provided parallel to waste containers at public spaces owned or controlled by municipal or state government by July 1, 2015.	

Solid Waste Management Entity-level Standards:	Deliverable to ANR
Education and Outreach Work with schools to implement a school-wide recycling program. Such a program might include the formation of a committee, a formal policy, and a way to measure the effects of the program on waste composition and amount. Entities will strive to work with 20% of schools within their jurisdiction each year.	Description of program for each school visited (e.g., list of committee members, policy statement and quantitative effects on waste through time); recommendations for improved materials management; log of schools visited.
Implement an ongoing public outreach campaign to inform the residents and businesses of the best management practices for recyclable materials. Include information about the disposal ban of mandatory recyclable materials. Components of this campaign will provide tailored information for sectors with specific recycling issues.	Provide copy of outreach materials, mailing lists to ANR.
Convenience Work with five businesses per year to increase access to recycling in their public spaces. Entities will target businesses that have high levels of public traffic, e.g., markets, gas stations, etc.	List of businesses for which assistance was provided. Description of recycling program at location.
Provide assistance planning the management of waste at public and private events (e.g., festivals, craft shows, weddings, parties, sporting events); request estimate of waste disposal and diversion in post-event report.	List of events in which assistance was provided. Estimate waste diversion and disposal at event.

CHAPTER 2: ORGANICS

The general term “organics” is given to material derived from living organisms such as yard trimmings, food scraps, wood waste, and paper and paperboard products (note: although considered organic, paper and paperboard products are most often managed as recyclables, and will be addressed in the recycling chapter in this plan). Organic materials are the largest component of MSW in the United States (approximately two-thirds of municipal solid waste (MSW); USEPA 2010 MSW Characterization Report). Keeping organics out of landfills saves landfill space, and removes a significant source of methane -- an extremely potent greenhouse gas.

There are several ways to reduce the amount of organics entering the waste stream. Available methods include source reduction; donation; composting; and anaerobic digestion. However, several barriers – both perceived and real – need to be addressed to successfully minimize the amount of organic material entering landfills. First, the “ick” factor of composting, and the lack of proper training of workers in the food industry where retention rates are low are the types of behavioral factors that contribute strongly to non-participation. Second, there may be reluctance to invest time and money into this emerging management method. Lastly, cost-effective collection and hauling will require thorough logistical management to mitigate odor and attraction of pests.

Vermont’s Universal Recycling Act 148 requires organics to be managed according to an organics hierarchy that reflects the management priorities promoted by the USEPA.

- Reduction at the source;
- Diversion for food for people;
- Diversion for agricultural uses, including for animals;
- Composting, nutrient management, & digestion; and
- Energy recovery.

Emphasis on reducing food waste through changes in food purchasing and preparation or re-purposing is a major element of managing this waste stream. Despite advances in technologies such as active landfill gas collection, anaerobic digestion and composting, the most efficient and environmentally sustainable alternative is reducing food waste prior to distribution.

Organic residuals that have been processed through composting can be used as a nutrient-rich soil amendment. Compost increases the nutrient content of soils, enhances soil structure, and improves moisture holding capability. The basics of composting are relatively straight forward. With a little space, air, water, organic material, and dedicated attention anyone can do it. Loads destined for compost facilities will need to be free of contamination (non-compostables) to produce a highly marketable end product. Options for composting range from single household (or “backyard”) practices, neighborhood and community garden scenarios, and centralized fixed small-to-large facilities.

- Most centralized composting of organics is accomplished through composting facilities regulated by ANR. Currently, there are approximately 20 such facilities in Vermont (Table XX in the History and Intent section of this Plan).
- Home composting has been practiced for generations as a way to turn kitchen and garden waste into a natural fertilizer. For many years, Vermont solid waste management entities have provided low-cost kits (e.g. composting bins) to increase the success rate of home composting.

An alternative technology to composting that is gaining prominence is anaerobic digestion. Anaerobic digesters break down organic material in the absence of oxygen to create “biogas.” Typical biogas is approximately 60% methane (VT Dept. of Agriculture Food and Markets website), which can be used for electricity or heat. Byproducts of the digestion process are valuable, as well. The residual solids can be used as animal bedding or soil amendments. There will soon be 16 anaerobic digesters operating on Vermont farms with more in the design phase. As a testament to the technology, anaerobic digestion has been an important component of organic processing of wastewater organics with 13 digesters operating at Vermont treatment facilities.

Being an extremely valuable resource, food should not be wasted by way the landfill; additionally, careful management of food first by minimizing food waste, and second by separating and managing residuals, can have both economic and environmental benefits.

Public Education and Outreach

A successful organics campaign will include creating an outreach and educational strategy to increase awareness of the benefits of organic waste reduction.

1. ANR will collaborate with other groups and agencies to develop an organics source reduction and diversion program for schools.
 - a. Tools and resources will be developed for teachers to impart the fundamentals of organics management at home, school, and on-the-go.
 - b. The solid waste management entities will provide assistance as needed in the establishment and maintenance of a school-wide organics diversion program for cafeteria scraps. A program shall include:
 - i. A designated Organics Advisory Committee. The group will be comprised of students, teachers and parents that make decisions and recommendations for the school organics program.
 - ii. A written policy stating the commitment to a school-wide organics program. This should include school-specific goals for increased rates of diversion and reduced rates of consumption and disposal.
 - iii. A method of tracking waste diversion.
2. ANR will educate and inform the commercial sector and the general public about the benefits of composting and the opportunities for additional beneficial uses. Efforts will target each sector (generators, haulers, processors, and end-users), and will be performed by the solid waste management entities and other associations. A list of current and potential opportunities for organics collection will be distributed to each sector.
3. Accepted Compost Practices (ACP) developed by ANR in collaboration with compost professionals and solid waste management entities, shall be promoted statewide.
4. ANR will promote source reduction, such as smart buying of food, as well as food “rescue” and donation programs.

Product Stewardship

While ascribing end-of-life responsibility for traditional recyclables through product stewardship can be relatively straightforward, it's not as easy when it comes to organic materials. The challenge is that there are many different levels at which organic materials are generated and distributed. There are also a number of different management strategies for the management of organics materials. Approaches such as source reduction, redistribution, diversion (e.g., composting and energy recovery) become significant aspects of stewardship leading to the sound management of organic wastes. To use a popular adage; There is no such thing as “organic waste”, only mismanaged organic resources.

Government Leadership

ANR will work with BGS top evaluate and promote a “State Offices Organics Program” that could be accomplished with a three-pronged approach:

1. All state employees will be educated on the fundamentals of organics management, including the effect on landfills and the environmentally beneficial uses of compost. Recurring training opportunities may be provided through the Human Resources training programs for employees wishing to become more involved in the organics program in their office, or agency.
2. Organics will be diverted from the waste stream in 100% of state and local government buildings by July 1, 2018 (end of 5 year Plan duration). Buildings that are utilized in part, or in whole by the Agency of Natural Resources will serve as a pilot, where organics diversion systems and best practices can be tested and optimized.
3. ANR will encourage state agencies to use Vermont compost in landscaping applications such as grounds, easements and medians. Not only will this close the loop in diverting organics from landfills, it reduces the need for pesticide and fertilizer use. This Environmentally Preferred Purchasing (EPP) by the state will also stimulate the market by indicating State confidence in the numerous benefits compost provides as soil amendment.

Infrastructure Improvements

An auxiliary benefit of government leadership in organics recovery will be to provide incentives to expand and improve organics processing infrastructure throughout the state. The convenience of access to organics processing facilities can significantly influence participation rates (Doug Mackenzie Mohr, 2010). Currently, many areas in Vermont are without such a facility. While backyard composting is a viable option for many Vermonters, there is a need for more large-scale organics operations to process curbside collection and high volumes of organic materials from the commercial sector.

Through the Vermont Food Bank and its partners, Vermont has an existing infrastructure which redistributes food that is not saleable but remains consumable. This non-saleable food from growers, retailers, manufacturers, and suppliers is collected and distributed to those in need around the state. According to the USEPA, the majority of non-saleable food, however, is currently disposed or composted rather than redistributed. Educational and promotional tools will be developed to increase awareness of the existing food rescue programs and promote assistance from additional redistribution organizations. Information will be distributed to large manufactures, supermarkets, wholesalers, farmers, food brokers, restaurants, caterers, corporate dining rooms, hotels, universities and other food preparation and serving establishments.

An effective infrastructure for expanding and improving composting in Vermont must include site development, management restructuring, modified hauling systems and scales. Act 148 requires an assessment of facilities and programs necessary at the state, regional, or local level to achieve the priorities and the goals established in the MMP, this includes agriculture, food and markets, an estimate of the number and type of composting facilities on farms.

Mandates and Disposal Bans

Act 148 requires a phased-in approach of organics diversion over time. Disposal bans will be in effect on leaf and yard residuals and clean wood waste by 2016, and on all food residuals by 2020. By instituting phased-in diversion rates on organics based on volume generated, and by requiring parallel collection of these materials at the same location where trash is collected, more of these materials can be diverted from disposal. The bill establishes a number of dates by which generators of organic materials must properly manage organic materials. The following is the timeline established by Act 148:

The Act requires larger organics generators to manage food organics according to organics hierarchy if a certified facility is within 20 miles, phased in over time.

- 2014 for generators of more than 104 tons/year;

- 2015 for generators of more than 52 tons/year;
- 2016 for generators of more than 26 tons/year;
- 2017 for generators of more than 18 tons/year;

By 2020, all food residuals, including that from households, must be diverted with no provision for distance.

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Performance Standards - Organics

State-level Standards:		Deliverable
STATEWIDE GOAL		
Vermont will reduce organics in the waste stream by 50% by the end of the Plan term; the phased-in approach spans an 8-year period, and allows for distance exemptions (greater than 20 miles). Only in 2020 will organics be entirely banned from disposal.		An analysis of the volume and nature of wastes disposed of in Vermont will be included in the 5-year revision of the MMP.
Education and Outreach	Within the first year, ANR will implement a state-wide public outreach campaign to inform the residents and businesses of the best management practices for organic materials, including information about the impending disposal ban of organic materials. Components of this campaign will provide tailored information for sectors with specific organics issues.	Description and assessment of the outreach programs will be documented in the required biannual report to the legislature.
	Within the first year, ANR will identify best practices in current school organics programs, and develop training tools and educational resources for a statewide education plan.	Compendium of resources to be provided to all solid waste management entities.
Convenience	Ensure all solid waste facilities offer collection of leaf and yard residuals by July 1, 2015.	Post on website a list of all services offered 1. at facilities, and 2. by curbside collection within the state.
	Ensure all solid waste facilities offer collection of food residuals by July 1, 2017.	
	Ensure all haulers offer curbside collection of leaf and yard waste by July 1, 2016.	
	Ensure all haulers offer curbside collection of food residuals by July 1, 2017.	

Solid Waste Management Entity-level Standards:	Deliverable to ANR
Work with schools to implement a school-wide organics program; such a program might include the formation of a committee, a formal policy, and a way to measure the effects of the program on waste composition and amount. Entities will strive to work with 20% of schools within their jurisdiction each year.	Description of program for each school visited (e.g., list of committee members, policy statement and quantitative effects on waste through time); recommendations for improved materials management; log of schools visited.
Education and Outreach Implement an ongoing public education and outreach campaign to inform the residents and businesses of the best management practices for organic materials. Include information about • upcoming deadlines for mandatory diversion of organics by generators • disposal bans of leaf and yard waste, food residuals. Components of this campaign will provide tailored information for sectors with specific organics diversion issues.	Provide copy of outreach materials, mailing lists to ANR.
Work with five businesses per year to increase access to organics diversion in their public spaces. Entities will target businesses that have high levels of public traffic, e.g., markets, gas stations, etc.	List of businesses for which assistance was provided. Description of disposal options at location.
Establish program to provide assistance in developing a plan to manage waste at public and private events (e.g., festivals, craft shows, weddings, parties, sporting events); request estimate of waste disposal and diversion in post-event report.	List of events in which assistance was provided. Estimate waste diversion and disposal at event.
Convenience Collaborate with five local food redistribution groups and networks per year to raise awareness and to expand programs throughout jurisdiction.	Provide description and function of food network in region. Detail efforts to expand redistribution network.
Establish program for clean wood recycling by July 1, 2016, including collection point(s) for both DIY consumers and contractors.	Provide description of efforts made toward these goals. Include data which represents volumes collected and management options pursued.

CHAPTER 3: CONSTRUCTION and DEMOLITION MATERIALS

It is estimated that of total waste landfilled nationally, up to 25% is construction and demolition (C&D) materials. Though this figure may vary by study and state, it represents a significant segment of the solid waste stream destined for landfill. Though considerable strides have been made in waste reduction and recycling, the focus of our state and local waste reduction efforts has been the municipal solid waste (MSW) stream. This is often at the expense of “special” wastes, such as C&D materials.

Since discarded C&D materials are not uniformly generated by all citizens, and in relatively small amounts in comparison to more urban areas, and the materials themselves are often bulky, or mixed with non-recyclable wastes, the markets for reuse and recycling of C&D are not as well developed in Vermont as are the markets for “traditional” recyclable materials. Further, partially as a result of the limited amounts of C&D generated, there are no dedicated C&D processing facilities in Vermont. Though a few C&D processing facilities exist in adjacent states, the hauling distances involved are often cost prohibitive. Some salvage of reusable materials occurs on a small scale, and generally metals and cardboard are removed from the C&D stream for recycling; however, the bulk of C&D materials are managed by disposal.

Public Education and Outreach

Public education and outreach is always critical in promoting the priorities of reducing consumption and disposal. In cooperation with the solid waste management entities and industry/trade organizations across the state, education and outreach efforts will supply essential information that consumers and businesses need to make environmentally responsible choices. Some of the objectives of this MMP as they relate to C&D materials education and outreach are as follows:

1. Promote Environmentally Preferable Purchasing (EPP) with outreach to architects, contractors, building supply stores, and associated trade groups.
2. Research and recommend C&D waste prevention and diversion Best Management Practices (BMPs). Get involved with national dialogue, keep current with market development, and encourage regional cooperation.
3. Offer training or inform builders of upcoming instruction opportunities concerning Environmentally Preferable Purchasing (EPP) purchasing, planning for C&D diversion, and field methods of diversion.
4. Advertise the economic and environmental benefits of C&D waste reduction to design, construction, and hauling communities.
5. Educate generators on the availability of recycling markets, the option to sell materials directly back to market, or reduce disposal costs by diverting materials for reuse or recycling.
6. Foster a relationship with the “green building” community, such as with Leadership in Energy and Environmental Design (LEED), the Vermont Green Building Network, ReSource, Renew, and Construction Materials Recycling Association, and others.

Product Stewardship

As the Agency develops a Product Stewardship Framework to streamline the development and process of product stewardship laws, it will include C&D materials in the effort to:

1. Evaluate carpet, as a C&D waste material, which has been increasingly recognized as a probable candidate in the realm of extended producer responsibility. As such, the Agency will stay informed and involved in carpet recycling initiatives and other EPR options.
2. Foster relationships between deconstruction companies, used building materials retailers, contractors, and green building groups in an effort to promote product stewardship as growing standard in waste management.
3. Support regional and national initiatives for “Take Back” programs for additional C&D materials. Examples of “Take Back” programs in place nationally include ceiling tiles and gypsum.

Government Leadership

In accordance with the Department of Buildings & General Service’s Comprehensive Environmental & Resource Management Program (2004), all State building projects are to have an approved Construction Materials Management Plan with the imposition of a financial penalty for non-compliance. Sound leadership examples can be derived from strict adherence to the Program’s plan as well as the following efforts:

1. Strengthen ANR ties with Department of Buildings and General Services (BGS) during the design phase of construction projects to assist in planning for progressive C&D materials management.
2. Ensure that all State building projects have a progressive ANR approved C&D Materials Management Plan. Lead by example by cooperatively adopting forward thinking initiatives and integrating them into the Plan. Support the implementation of, and compliance with, the construction Materials Management Plan.
3. Work with BGS to “Lead by Example,” on innovative pilot projects and progressive efforts. An example would be the distribution of furnishing and fixtures from the Hurricane Irene impacted State buildings.
4. Broadcast success stories in recurring newsletters, social media websites, industry media outlets, and the Agency website.
5. Development projects requiring an Act 250 permit, and which involve greater than 10,000 square feet of construction or demolition currently must submit, as part of the permit application, a Construction Site Waste Reduction Plan to ANR for approval. By requiring applicants to consider C&D management, the Agency has promoted waste prevention and diversion practice. This effort will be redoubled by
 - a. Providing consistent and comprehensive Solid Waste Program review of those C&D Site Waste Reduction plans required by the Act 250 process,
 - b. Performing routine compliance audits;
 - c. Providing waste reduction outreach and education to applicants, designers, developers, and contractors.
6. Work collaboratively with surrounding states on encouraging C&D diversion, as a means to facilitate interstate markets development for recyclable materials. Work to devise mutually supported strategies (such as uniform definitions, waste reduction goals, uniform facility permitting standards) so as not to impede the flow of recyclable materials, or send materials as waste to any one state.

Infrastructure Improvements

Currently there are few options in terms of C&D materials management facilities in Vermont. The State has only a few facilities devoted to reuse and recycling. As with other recycling and reuse programs, the availability and convenient access to facilities such as material exchange centers, recycling depots, and direct to market buyers is

vital to promoting and enhancing sound materials management. This is also true of C&D waste management. Obstacles such as markets, distance, and the lack of dedicated facilities pose great challenges in the realm of C&D materials management in Vermont. With this in mind, over the five (5) year MMP period, the Agency will work with partners to:

1. Evaluate current C&D collection, recycling, processing and disposal infrastructure. Based on that evaluation, target underserved areas to develop the necessary infrastructure further.
2. Facilitate relationships between sources of clean waste wood and potential users (such as industrial wood-fired boilers or composting facilities), which should enhance a local market for the material.
3. Foster markets for used building materials by promoting and working with used building material stores. Facilitate the networking of contractors and developers with these entities as a resource for diverting, rather than disposing C&D materials.
4. Encourage the recycling of waste asphalt shingles by working with generators, potential processors, and potential users of the end product.
5. Work with VTrans (Vermont Agency of Transportation) to amend bituminous concrete specifications to allow the inclusion of recycled asphalt shingles.
6. Encourage solid waste management Districts, drywall wholesalers, contractors and waste haulers to develop drywall recycling options on a systematic, statewide basis. The establishment of market outlets will be an anticipated outcome of this effort. Join in on regional and national dialogue with drywall manufacturers to put into place consistent take back and recycling programs.

Mandates and Disposal Bans

In cases where financial incentives (e.g. reduced tipping fees) are not effective, mandates and bans can be proposed. Outside of the option to institute mandates and bans, conditions on State contracts and grants can be imposed to stimulate attainment of standards.

Waste mandates and bans are designed to promote business and residential recycling and reuse efforts, conserve disposal capacity, and to reduce adverse environmental impacts. Mandates can stimulate the development of new, or improved, infrastructure to collect banned items. Act 148 establishes a phased in diversion schedule which includes clean wood as one of the target materials. The following efforts will be pursued in this plan:

Propose a phased landfill ban on select C&D materials:

- a. Start with materials such as, metals and carpet, with established and growing recycling markets, or markets available regionally.
- b. Phase in bans on disposing materials that currently have existing recycling markets, either in-state or regionally, such as asphalt roofing shingles; or materials that are problematic in landfills such as drywall.

Performance Standards – Construction and Demolition Materials

State-level Standards:		Deliverable
STATEWIDE GOAL		
The goal will be to reduce the tonnage of C&D materials requiring disposal during the interval of this plan. However, high-quality data for the generation and disposal of C&D materials is relatively scant: it is often commingled and disposed with MSW, and therefore reported as MSW; it can also be reported as beneficial use material for landfill cover. Accordingly, it would be difficult to propose a quantitative statewide goal. Therefore, ANR will work with solid waste management entities, facilities and haulers to improve the data collection and reporting of the generation and end-of-life management of C&D materials. While many businesses and residents in Vermont have ready access to services for traditionally recycled materials, this is not the case with C&D. ANR will continue to support the development of new market outlets for C&D materials (e.g., drywall, asphalt shingles, dimensional lumber) across the state. By removing barriers to market development, infrastructure development and operation can become more convenient and reliable for generators of C&D residuals.		A description and assessment of any programs developed to divert C&D materials will be documented in the required biannual report to the legislature.
Education and Outreach	Within the first year, ANR will implement a state-wide public outreach campaign to inform the residents and businesses of the best management practices for C&D materials. The major thrust of this campaign will provide tailored information for sectors that generate C&D waste.	Description and assessment of the outreach programs will be documented in the required biannual report to the legislature.

Solid Waste Management Entity-level Standards:		Deliverable to ANR
Education and Outreach	Implement a public outreach campaign to inform the residents and businesses in jurisdiction of the best management practices for the reduction of C&D materials generated and for end-of-life management.	Provide copy of materials, mailing lists to ANR on an annual basis.
	Establish program for clean wood recycling by July 1, 2016, including collection point(s) for both DIY consumers and contractors.	
	Determine the current local and regional impediments to an asphalt shingle collection program for both DIY consumers and contractors; work to address these issues with state and local groups. Establish program for asphalt shingles recycling by end of the Plan term.	
Convenience	Determine the current local and regional impediments to a drywall collection program for both DIY consumers and contractors; work to address these issues with state and local groups. Establish program for drywall recycling program by end of the Plan term.	Provide description of efforts made toward these goals. Include data which represents volumes collected and management options pursued.

CHAPTER 4: HOUSEHOLD HAZARDOUS WASTE, CONDITIONALLY EXEMPT GENERATOR WASTE, ELECTRONIC WASTE and TOXICS

Household Hazardous Waste (HHW) is a broad term used to signify such items as automotive fluids, batteries, household chemicals, and electrical products with hazardous components disposed by households. United States Environmental Protection Agency (USEPA) defines HHW as “Leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients that poses a threat to the environment and public health. These chemicals are costly to collect and manage separately from municipal solid waste.”

Vermont Solid Waste Rules define HHW as “waste that would be subject to regulation as hazardous waste if it were not from households” (6-201 Definitions). Vermont statute requires solid waste planning to address the volume and toxicity of the waste stream. Vermont has worked carefully to integrate programs designed to achieve the reduction of toxic materials both at the source and at the point of waste generation.

In 2010 Vermont became the 21st state to pass an electronic waste (E-waste) recycling law that provides for a manufacturer-funded system to fund recycling of electronic waste for households, charities, schools, and businesses who employ 10 or fewer employees (covered entities). While the law bans the disposal of various types of electronic waste in Vermont, it provides for convenient, cost-free collection of computers, televisions, printers, monitors, and computer peripherals. This is a convenience-based program, with more than 90 locations located throughout the state. In the first program year, the program exceed the state goal by 140%, with 7.7 pounds per capita of electronic waste was collected. In 2012 the law was expanded to include anyone who brings in seven or fewer of these devices as a covered entity.

Districts, Alliances, and municipalities manage HHW. Although state and Federal laws categorically exempt HHW from hazardous waste regulations, HHW is still regulated under the Vermont Solid Waste Management Rules. Therefore, since 1992, Districts, Alliances, and municipalities in Vermont have been required to include provisions in their SWIPs for the management of this waste as “unregulated hazardous waste.” In Vermont there is a requirement for the solid waste entities to hold a minimum of two household hazardous waste collection events per year. Most HHW is legislatively banned from landfill disposal; however, some hazardous waste such as petroleum based fuels, fireworks, flares, gas cylinders, pool chemicals, drain cleaners, and sharps are examples of dangerous materials that are not formally banned from landfills if the wastes are collected from households.

In addition to households, some Districts, Alliances, and municipalities provide collection services for small businesses that are classified as Conditionally Exempt Generators (CEG). These are businesses that generate small quantities of hazardous wastes (less than 220 pounds per month). Waste collected from CEGs must be managed under Vermont Hazardous Waste Management Regulations (VHWMR) and therefore should be segregated from HHW. If CEG waste is co-mingled with HHW, all waste is managed as CEG waste and the exemption for household hazardous waste management may not be utilized. For the sake of discussion this Plan will refer to both HHW and CEG collectively understanding that there are finite differences in regulations.

There are currently five permanent HHW/CEG collection facilities available in different regions of the State, although not all are opened throughout the year. Statewide overall participation rates on average were approximately 10% of the State’s population in 2010. This low participation rate more than suggests that, in addition to extended producer responsibility efforts, increased availability of fixed facilities and enhanced public education and outreach need to be provided.

Public Education and Outreach

Public education and outreach is important to promote the proper disposal of HHW/CEG waste and to increase participation both at fixed facilities and collection events. Well planned education and outreach activities can generate awareness of the environmental and health risks associated with HHW/CEG waste and promote changes in behavior when making product choices and identifying proper disposal of hazardous waste products. ANR will

explore opportunities to educate and inform both the general public and small business about the benefits and the opportunities of sound HHW/CEG management.

ANR will:

1. ANR will collaborate with other groups and agencies to develop an educational program about Toxics.
 - a. Tools and resources will be developed for teachers to impart the fundamentals of waste management at home, school, and on-the-go.
 - b. The solid waste management entities will provide assistance as needed in the establishment and maintenance of a school-wide Toxics program. A program shall include:
 - i. A designated Toxics Advisory Committee. The group will be comprised of students, teachers and parents that make decisions and recommendations for the school Toxics program.
 - ii. A written policy stating the commitment to a school-wide Toxics program. This should include school-specific goals for reducing the presence of toxics on campus, and the proper end-of-life management of unavoidable toxics.
 - iii. A method of tracking waste diversion.
2. ANR will continue to look for opportunities to educate and inform the commercial sector and the general public about the benefits of recycling. Efforts will target sector-specific generators, and will be performed by the solid waste management entities and other associations.
 - a. Promote participation in Vermont E-cycles program
 - b. Develop a comprehensive list that provides detailed information about HHW collection events and permanent collection facilities that is easily accessible by the general public.

Product Stewardship

Hazardous waste generated in the household such as cleaners, batteries, mercury containing devices, paints, pesticides and automotive products have been on the forefront of 'environmental concern' for many years. The practice of managing these products and the associated costs have prompted regulators to more closely examine the manufacturer's role in the funding of the proper disposal or recycling of their waste products. Product stewardship and extended producer responsibility programs have addressed many barriers of cost and convenience to the general population. Today, many states, including Vermont, have pursued manufacturer participation for proper recycling of such products as fluorescent bulbs, mercury thermostats, and electronic wastes through regulated programs. Though general HHW/CEG event and facility participation rates have increased somewhat, it is very clear that extended producer responsibility programs should be pursued.

To encourage cost-effective and convenient management of toxic materials ANR will:

1. Promote the development of product stewardship laws and programs, and research product stewardship strategies utilized in other states that promote sound management of HHW/CEG waste.
2. Increase the number of manufacturer- led product take-back programs for end-of-life products with toxic and hazardous constituents such as paints, pharmaceuticals and other materials.

Government Leadership

Government leadership is important in promoting sound management of hazardous wastes.

ANR supports the following efforts:

1. Keep abreast of and support procurement policies for Vermont State Government that adheres to Environmentally Preferable Purchasing (EPP) for all state agencies. This is intended to encourage the elimination of priority toxic substances such as arsenic, lead and mercury in products and purchased by the state, public and private sectors.
2. Promote the use of Electronic Product Environmental Assessment Tool (EPEAT) standards for state procurement policies for computers and computer related products. [see State Electronics Council website.]
3. Ensure continued education, and best materials management practices (BMP) are conducted by State owned and operated auto repair shops. Previous efforts made by ANR's Environmental Assistance Program have shown great success with BMP adoption.
4. Promote addressing the issue of high hazard wastes (such as explosives and chemically unstable/reactive waste) at the state emergency response level. Some high hazard events have risen to a level that required State involvement. While some progress has been made on this effort, high hazard wastes remain a topic of discussion both in the public and private sectors.
5. Utilize existing training courses for use by municipal officials and staff that focus on proper HHW/CEG collection and management, and evaluate overall understanding comprehension standards for necessary updates and improvements to education efforts. Vermont Environmental Assistance Office currently offers periodic HHW/CEG training workshops around the state at no charge.

Infrastructure Improvements

Historic Solid Waste Management Plans and legislative reports have recommended establishing ever increasing numbers of fixed HHW/CEG facilities in an effort to enhance convenience. To date, there are five permanent facilities which operate in Addison County, Chittenden County, Northeast Kingdom (seasonal), Northwestern Vermont, and Rutland County. When combined with periodic HHW/CEG collection events held around the State, there remains a false perception that a high number of convenient options exist for the management of these materials. Actually, the majority of collection opportunities are available only with infrequent collection events.

Immediately after Tropical Storm Irene, there was a need for convenient HHW collection options in Vermont and it was difficult to meet this need with the current infrastructure. ANR and EPA hosted several collection events in conjunction with the use of permanent facilities in areas damaged by the storm. Areas served by facilities had a clear advantage.

Data gathered by ANR through reporting requirements indicate that permanent facilities encourage much greater participation rates. As an example, in instances where the management of HHW/CEG has progressed from periodic events to fixed facilities, a number of the Solid Waste Management Entities have documented increased participation. The Northeast Kingdom Solid waste District switched collections from periodic events to permanent facility between 2000 and 2001. In that one year they exhibited a 12% increase in participation and a 20% drop in disposal costs. The Addison County Solid Waste Management District provides data that documents strong increased participation rates subsequent to their fixed facility coming online in 2005. They show that from 2005 to 2011 participation rates for HHW increased 43% and 44% for CEG waste. Chittenden Solid Waste District shows a clear trend in growth rate exhibiting that in 2011 their fixed facility (The Environmental Depot) experienced three times the participation rate as compared to their "Rover" events.

The growth in participation rates can also be partially attributed to the critical aspect of awareness, pointing to the importance of education and outreach. However, it is apparent nationwide, that continuous collection services which provide convenient access both by proximity and predictable availability (e.g. designated operating schedule) enhances participation rates. To that end, this MMP establishes an implementation schedule (see Standards) during which all SWIP approved entities are required to have access to fixed facilities.

Mandates and Disposal Bans

Hazardous waste released into the environment can contaminate our air and water. Regulations which place mandates and landfill bans on hazardous materials are in place to prevent landfilling of these materials. In Vermont, landfill bans are in place on, rechargeable batteries, lead acid batteries, certain electronic devices, fluorescent bulbs, motor oil, paints, regulated medical waste, and mercury containing devices. There are also landfill bans on non-hazardous materials, such as tires and white goods.

Performance Standards - Household Hazardous Waste, Conditionally Exempt Generator Waste, Electronic Waste and Toxics

State-level Standards:		Deliverable
STATEWIDE GOAL		
The goal is to reduce toxicity in the waste stream and to expand and provide convenient, cost-effective HHW/CEG management systems statewide. Such an expansion should include universal access to year-round HHW/CEG collection programs in close proximity to all residents.		Description and assessment of the HHW/CEG collection programs throughout the state will be documented in the required biannual report to the legislature.
Education and Outreach	Within the first year, ANR will implement a state-wide public outreach campaign to inform the residents and businesses of the best management practices for hazardous wastes, including information about the disposal bans of such materials.	Description and assessment of the outreach programs will be documented in the required biannual report to the legislature.
	Within the first year, ANR will identify best practices for managing hazardous wastes in schools, and develop training tools and educational resources for a statewide education plan.	Compendium of resources to be provided to all solid waste management entities.

Solid Waste Management Entity-level Standards:	Deliverable to ANR
Education and Outreach Work with schools to educate students about proper handling and disposal of toxics and HHW/CEG. Entities will strive to work with 20% of schools within their jurisdiction each year. Entities will work with school officials to reduce or eliminate as much of their hazardous/toxic waste streams as possible; ensure proper end-of-life management of materials. Implement an ongoing public outreach campaign to inform the residents and businesses of the best management practices for hazardous materials. Include information about the disposal bans	Documentation of visits; recommendations for improved materials management. Provide copy of outreach materials, mailing lists to ANR
Convenience Each solid waste management entity shall continue to provide a minimum of 2 HHW/CEG events/year or access to a permanent facility By the end of the term of this plan, each solid waste management entity will provide year-round access to at least one permanent HHW/CEG collection facility to citizens within its jurisdiction. Solid waste management entities may work in collaboration with other entities to provide these services Through careful and comprehensive data collection, each solid waste management entity will establish a baseline participation rate. Such a baseline will serve to document relative success in future surveys. Tangible annual growth in participation rate is an expectation.	Provide date of events and submit required annual reporting Define all services offered Provide improved data

CHAPTER 5: SLUDGE, SEPTAGE and MISCELLANEOUS RESIDUAL WASTES

“Residual wastes” is a term encompassing several waste materials. Primary among these is the sludge that is produced by the treatment of sewage in a wastewater treatment facility (WWTF), and septage that is removed from an on-site septic system or holding tank. Secondary residual wastes include the sludge produced by the biological treatment of dairy wastes, and the sludge produced by the treatment of drinking water supplies, wood ash, and short paper fiber. What these waste streams all have in common is that they all can potentially be managed by application to agricultural lands as a valuable nutrient source or soil conditioner, rather than being disposed via landfilling or incineration. Sewage sludge, which has been treated and shown to meet the established standards for this material to be managed via land application, is generally referred to as “biosolids.”

In 2011, the last year for which data are available, Vermont’s WWTFs generated approximately 56,000 wet tons of sludge (at 15% solids), of which about 16,000 wet tons were treated to the biosolids standards and reused in agronomic settings. Of the remaining sludge volume, approximately 39,000 wet tons was disposed by landfilling. Considering that a wet ton of sludge occupies a volume of about 1.3 cubic yards; in 2011 alone, more than 50,000 cubic yards of sludge was placed in the two landfills operating in Vermont. Over 43 million gallons of septage was pumped from Vermont’s on-site septic systems in 2011. Of that amount, 60% was either incinerated at out-of-state facilities or was disposed at WWTFs that similarly dispose of the sludge they produce. The remaining 40% was either directly land applied following treatment for pathogen reduction or, in the case of septage taken to a WWTF that otherwise uses the biosolids they produce across the process.

Unlike household trash and other closely related streams of municipal solid waste, there is very little that individual Vermont residents can do to reduce the volume of residual wastes that are being disposed versus used. Other than septage removed from on-site septic systems, an activity which itself is not conducted by individual homeowners, residual wastes are almost exclusively produced and managed by municipal facilities or by private sector businesses. Although wood ash and short paper fiber is generally managed by private sector companies that contract with generators of these wastes, and in turn market these materials to third part customers; this is not the case for biosolids. Nearly 100% of biosolids are managed directly by the generator or, shipped directly to an incinerator or, sent to a landfill for disposal.

Public Education and Outreach

A successful effort to foster the increased beneficial use of residual wastes must include creating an outreach and educational strategy to increase awareness of the benefits of these materials.

1. Encourage WWTFs and other governmental programs to offer tours and educational opportunities to local schools and universities
2. ANR will continue to look for opportunities to educate and inform the commercial sector and the general public about the benefits and the opportunities for beneficial uses of residual wastes

Government Leadership

State government should lead by example. This could be accomplished by encouraging various state agencies to:

1. Use short paper fiber and exceptional quality (EQ) biosolids in reclamation or repair projects where a vegetative cover needs to be established
2. Coordinate with AOT for the use EQ biosolids as a nutrient source on interstate highway medians
3. Assure that the wood ash produced in any state owned and operated facilities is diverted to agricultural uses rather than being disposed

Infrastructure Improvements

Infrastructure for residual waste management is currently provided only by municipalities and private sector generators. Limited funding is available to municipalities that construct new biosolids management infrastructure as part of a WWTF upgrade, but no such public funding is available to the private sector generators or residual waste managers.

ANR will continue to look for opportunities to educate and inform the commercial sector and the general public about the benefits and the opportunities for beneficial uses of residual wastes. In concert with the Agency's efforts it is expected that all solid waste management entities will have implemented locally specific education and outreach programs.

DRAFT

Performance Standards - Sludge, Septage and Miscellaneous Residual Wastes

State-level Standards:		Deliverable
STATEWIDE GOAL		
The beneficial reuse of residual wastes has historically been an objective for the management of these materials. Act 148 did not include any specific targets for the diversion of residual wastes to beneficial uses. However, a beneficial use rate of 75% remains the standard that ANR would like to see accomplished.		
Education and Outreach	ANR will work with stakeholders through education and the exchange of information in an attempt to craft legislation that will provide additional financial incentives aimed at fostering increased beneficial use of residual materials	Possible legislation
Solid Waste Management Entity-level Standards:		
	In an effort to raise awareness, solid waste management entities will coordinate with local wastewater management facilities and schools to provide a learning experience relevant to residual waste management. This may include presentations, field trips	Documentation of visits; description of program.
Education and Outreach	Implement a public education and outreach campaign to inform the residents and businesses of the best management practices for biosolids; this can include programs that tour local facilities.	Provide copy of materials, mailing lists to ANR
	It remains important for solid waste management entities to work with their respective municipalities and plant operators to encourage beneficial use of biosolids and septage. Solid waste management entities will work with local generators of residual wastes to explore, develop, and implement opportunities for beneficial use. Such efforts will be pursued and reported on an annual basis.	Document and report efforts

Appendix XX.

Municipal solid waste [MSW] is the everyday ‘trash’ that is discarded by the public; it is a combination of household and commercial solid wastes. MSW that is not diverted for reuse or recycling is disposed via landfill or incineration. Vermont will reduce the disposal rate of municipal solid waste by 35% % from 432,389 tons to 281,053 tons by end of the Plan term. This will be achieved through a variety of new and existing efforts designed to educate and to offer services to Vermont citizens and organizations in the proper management of materials; these programs and efforts form the basis of the General and subsequent Materials Specific Sections.

The statewide goals stated in this document were estimated using two techniques:

1. the potential effect determined by case studies that investigated the outcomes of one or more programs similar to what is outlined in this MMP and/or Act 148, and
2. the amount of waste currently generated that will be diverted because of landfill bans and/or mandated programs (Act 148).

Table 1. A break-down of actions and services outlined in the MMP and the estimates of the effects of these actions and services will have on the amount of waste.

- Cumulative effects (from Materials Specific Sections of this MMP):
Recyclables, Packaging and Printed Materials: 75% reduction (estimated in MMP)
Organics: 50% reduction (estimated in MMP)
- PAYT
Volume based system can result in a decrease of waste by 20% - 51%
Weight based system can result in a decrease in waste by 14% - 72%
Frequency based system can result in a decrease in waste by 20%

Literature cited:

- Allers, MA, and C Hoeben. 2010. Effects of unit-based garbage pricing: a differences-in-differences approach. *Environmental and Resource Economics* 45:405-428.
- Dijkgraaf, E, and R Gradus. 2009. Environmental activism and dynamics of unit-based pricing systems. *Resource and Energy Economics* 31:13-23
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- Fullerton, D, and TC Kinnaman. 1996. Household responses to pricing garbage by the bag. *The American Economic Review* 86(4):971-984.
- Huang, J, JM Halstead and SB Saunders. 2011. Managing municipal solid waste with unit-based pricing: policy effects and responsiveness to pricing. *Land Economics* 87(4):645-660.
- Linderhof, V, P Kooreman, M Allers, and D Wiersma. 2001. Weight-based pricing in the collection of household waste: the Oostzaan case. *Resource and Energy Economics* 23:359-371.
- Reschovsky, JD, and SE Stone. 1994. Market incentives to encourage household waste recycling: paying for what you throw away. *Journal of Policy Analysis and Management* 13(1): 120-139.
- Skumatz, LA. 2008. Pay as you throw in the US: Implementation, impacts and experience. *Waste Management* 28:2778-2785.
- Van Houtven, GL, and GE Morris. 1999. Households behavior under alternative pay-as-you-throw systems for solid waste disposal. *Land Economics* 75(4):515-537.

Vermont will reduce recyclables in the waste stream by 75% by the end of the Plan term; this number reflects the increase in the recycling rate that will result from several actions on “mandated recyclables” that will go into effect over the next few years, but also accounts for the portion of potentially recyclable materials that is NOT included in the definition of “mandated recyclables”. This goal was identified based on both

1. studies that have examined the quantitative effects of PAYT, outreach and education, and parallel collection on recyclables, and
2. estimates of quantities that will be diverted due to mandates and bans.

Table 2. A break-down of actions and services outlined in Chapter 1 and the estimates of the effects of these actions and services will have on the recycling rate.

- PAYT
 - Volume based system can result in an increase in recyclable waste by 18%
 - Weight based system can result in an increase in recyclable waste by 12% - 50%
 - Frequency based system can result in an increase in recyclable waste by 5%
- Outreach and education
 - Can result in 12% - 31% increase in recycling
- Recycling in every school
 - [no data available]
- Disposal ban on mandated recyclables (2015)
 - [no data available]
- Parallel collection (transfer stations) (2014)
 - [no data available]
- Parallel collection (haulers) (2015)
 - Can result in 27% - 58% increase in recycling
- Parallel collection (public spaces) (2015)
 - [no data available]

Literature cited:

- Dijkgraaf, E, and R Gradus. 2009. Environmental activism and dynamics of unit-based pricing systems. *Resource and Energy Economics* 31:13-23
- Frale, GW, and M Berkshire. 1995. Pay-as-you-Waste: State of Iowa Implementation Guide for Unit-based Pricing. East Central Iowa Council of Governments and Iowa Department of Natural Resources, Cedar Rapids, Iowa.
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- Van Houtven, GL, and GE Morris. 1999. Households behavior under alternative pay-as-you-throw systems for solid waste disposal. *Land Economics* 75(4):515-537.

STATEWIDE GOAL:

Vermont will reduce organics in the waste stream by 50% by the end of the Plan term; the phased-in approach spans an 8-year period, and allows for distance exemptions (greater than 20 miles). Only in 2020 will organics be entirely banned from disposal. This will be achieved through the efforts described further in this Chapter. This goal was identified based on both

1. studies that have examined the quantitative effects of programs such as PAYT, and
2. estimates of quantities that will be diverted because of composting programs in schools, and a phased-in organics ban.

Table 3. A break-down of actions and services outlined in Chapter 2 and the estimates of the effects of these actions and services will have on the organics diversion rate.

- PAYT
 - Volume based system can result in a decrease of organics waste by 8% - 43%
 - Weight based system can result in a decrease in organics waste by 51% - 67%
 - Frequency based system can result in a decrease in organics waste by 44%
- Outreach and education
[no data available]
- Composting in every school
Estimated 32.70 tons/week are produced by VT K-12 schools*
- 100% of organics diverted from all state and local government buildings
[no data available]
- Bans:
 - leaf and yard waste (2016)
[no data available]
 - clean wood (2016)
[no data available]
- organics generators:
 - 104 tons/year (2014) "x-large"
Estimated 1350.72 tons/week are produced by x-large generators*
 - 52 tons/year (2015) "large"
Estimated 1496.00 tons/week are produced by x-large + large generators*
 - 26 tons/year (2016) "medium"
Estimated 1697.27 tons/week are produced by x-large + large + medium generators*
 - 18 tons/year (2017) "small"
Estimated 1888.08 tons/week are produced by x-large + large + medium + small generators*
 - ALL (2020) "all"

* = amount estimated using database compiled by Highfields Center for Composting, accessed August 2012

Literature cited:

- Allers, MA, and C Hoeben. 2010. Effects of unit-based garbage pricing: a differences-in-differences approach. *Environmental and Resource Economics* 45:405-428.
- Dijkgraaf, E, and R Gradus. 2009. Environmental activism and dynamics of unit-based pricing systems. *Resource and Energy Economics* 31:13-23
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THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and _____ (hereafter known as "Customer,"), currently having an address at _____ agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the Beard Building at 15 East State Street in Montpelier ("Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 200.1 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Joan and Milton Beard
1606 Barnes Hill Rd.
Waterbury, VT 05677

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

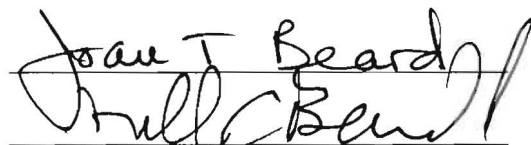
IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the _____ day of _____, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

By:



Milton Beard, Authorized Agent

11/27/12

Date Signed

15 East-Start JT

**Montpelier
District Heat**

Customer Agreement

November 28, 2012

HOT WATER HEAT AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and City Center Montpelier, LLC, a Vermont limited liability company (hereafter known as "Customer,"), currently having an address at 210 College Street, Suite 201, Burlington, VT, 05401 agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the City Center building located at 89 Main Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver heat and hot water generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide heat to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase heat from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 775 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Section 2.1), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the

undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Section 21.4 and shall be addressed as follows:

IF TO CUSTOMER: City Center Montpelier, LLC
c/o Doug Nedde
210 College St., Suite 201
Burlington, VT 05401

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTU/h per month
July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTU/h per month
July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTU/h per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the _____ day of _____, 2012.

City of Montpelier, Vermont

City Center Montpelier, LLC

William Fraser, City Manager

By:



Doug Nedde, Authorized Agent

Date Signed

11/24/12

Date Signed

William Fraser

From: Roman Piaskoski (1PME) [roman.piaskoski@gsa.gov]
Sent: Friday, August 31, 2012 3:19 PM
To: Harold Garabedian; Chuck Drury (1PME)
Cc: William Fraser; Gwendolyn Hallsmith; Waikit Lui (1PCS); Brian Wong; Timothy Shobbrook (1PSK); Thomas Eberhardt (1PSK); Walter Perez
Subject: Re: Status Call

Harold,

I can have our Contracting Officer, Chuck Drury, and myself available at 11:00 AM on Wednesday. I can not guarantee any other Team members from GSA but will try.

The "acquisition plan has been approved. The \$155,000 has been funded. We are prepared to contract for connection services and hot water supply. GSA as back -up to system may be off table, but can be revisited as well as the possibility of a capacity rebate on high demand days if it would be advantageous for GSA to drop off the District System, (lowering the demand/demand response).

In any case, negotiation will now be handled by and through Chuck as CO.

Roman Piaskoski
Branch Chief, Energy, Utilities & Environment
Public Buildings Service
GSA New England
O'Neill Federal Building
Boston, MA 02222

617.565.4693 ofc
617.893.0326 cell

On Fri, Aug 31, 2012 at 3:02 PM, Harold Garabedian <harold.garabedian@gmail.com> wrote:

Hi Roman –

This past week the City Council authorized the Montpelier District Project to move forward.

The next step is for the City to develop construction documents and develop the RFP to receive construction bids.

I would like to set you a call with you for next week, either Tuesday or Wednesday ideally. The purpose of the call would be for the City to update GSA on project Status and Schedule, GSA to update City on Procurement

Plan, have concurrence on design process for GSA building connection, review potential for GSA building being a source of “back-up” heat to the distribution system, and any other items that should be discussed.

If you let me know what works for you, I can coordinate on this end.

All the best on this holiday weekend.

-- Harold

Harold Garabedian

Energy & Environmental Analytics

132 Northfield Street

Montpelier, Vermont 05602 USA

tel: +1 802 595 5412

email: harold.garabedian@gmail.com

MEMORANDUM

TO: William J. Fraser, City Manager

FROM: Barney Bloom, Washington County Side Judge

SUBJECT: District Heat – Agreement

DATE: November 28, 2012

We have consulted with John Page (Montpelier attorney), and the County has agreed that the contract is acceptable. We have a few details we'd like to talk with you about and questions regarding financing, etc.

Other than that, we are ready to sign. I expect that my colleague will sign the Agreement by the end of the week.

Judge K. B. Bloom

**Montpelier
District Heat**

Customer Agreement

October 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and N&M Real Estate (hereafter known as "Customer,"), currently having an address at 29 Church St. 3rd floor, Burlington, VT agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the New England Culinary Institute building located at 118 Main Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 375.1 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Jeff Nick
29 Church Street, 3rd Floor
Burlington, VT 05401

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 28th day of November, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

N&M Real Estate, LLC

By:

Jeff Nick

Date Signed

11/28/12

**Montpelier
District Heat**

Customer Agreement

October 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and Everett Properties (hereafter known as "Customer,"), currently having an address at 50 State Street, Montpelier, VT agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the buildings located at 52, 46 and 27 State Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System. Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 791 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements

hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Stephen Everett
50 State Street
Montpelier, VT 05602

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 20th day of NOVEMBER, 2012.

City of Montpelier, Vermont

Everett Properties

William Fraser, City Manager

By:


Stephen Everett, Authorized Agent

Date Signed

11/20/12

Date Signed

**Montpelier
District Heat**

Customer Agreement

October 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and River Street Associates, LLP. (hereafter known as "Customer,"), currently having an address at PO Box 1087, Montpelier, VT agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the 17 State Street building located at 17 State Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 163 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements

undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Stephen Ribolini
PO Box 1087
Montpelier, VT 05601

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month
July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month
July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 26th day of November, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

River Street Associates, LLP.

By:



Stephen Ribiloni, Authorized Agent

Date Signed

**Montpelier
District Heat**

Customer Agreement

November 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and Vermont Mutual Insurance Company (hereafter known as "Customer,"), currently having an address at 89 State Street, Montpelier, Vermont agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the Vermont Mutual Insurance building located at 89 State Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 1,100 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve any legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: William Catto
Vermont Mutual Insurance Company
P. O. Box 188
Montpelier, VT 05601

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 – June 30, 2014 Capacity Charge Rate is \$4.29 per MBTU/h per month
July 1, 2014 – June 30, 2015 Capacity Charge Rate is \$4.35 per MBTU/h per month
July 1, 2015 – June 30, 2016 Capacity Charge Rate is \$4.42 per MBTU/h per month
July 1, 2016 – June 30, 2017 Capacity Charge Rate is \$4.49 per MBTU/h per month
July 1, 2017 – June 30, 2018 Capacity Charge Rate is \$4.56 per MBTU/h per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 28th day of November, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

Vermont Mutual Insurance Company

By:

Brian C. Eagan CFV
Brian C. Eagan,
Authorized Agent

11/25/12
Date Signed

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and _____ (hereafter known as "Customer,"), currently having an address at _____ agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the Beard Building at 15 East State Street in Montpelier ("Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 200.1 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Joan and Milton Beard
1606 Barnes Hill Rd.
Waterbury, VT 05677

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

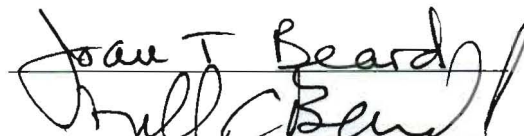
IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the _____ day of _____, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

By:



Milton Beard, Authorized Agent

11/27/12

Date Signed

15 East State ST

Montpelier District Heat

Customer Agreement

November 28, 2012

HOT WATER HEAT AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and City Center Montpelier, LLC, a Vermont limited liability company (hereafter known as "Customer,"), currently having an address at 210 College Street, Suite 201, Burlington, VT, 05401 agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the City Center building located at 89 Main Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver heat and hot water generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide heat to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase heat from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 775 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Section 2.1), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the

undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Section 21.4 and shall be addressed as follows:

IF TO CUSTOMER: City Center Montpelier, LLC
c/o Doug Nedde
210 College St., Suite 201
Burlington, VT 05401

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTU/h per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTU/h per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTU/h per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the _____ day of _____, 2012.

City of Montpelier, Vermont

City Center Montpelier, LLC

William Fraser, City Manager

By:



Doug Nedde, Authorized Agent

Date Signed

11/24/12

Date Signed

**Montpelier
District Heat**

Customer Agreement

October 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and Everett Properties (hereafter known as "Customer,"), currently having an address at 50 State Street, Montpelier, VT agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the buildings located at 52, 46 and 27 State Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System. Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 791 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements

hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Stephen Everett
50 State Street
Montpelier, VT 05602

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 20th day of NOVEMBER, 2012.

City of Montpelier, Vermont

Everett Properties

William Fraser, City Manager

By:


Stephen Everett, Authorized Agent

Date Signed

11/20/12

Date Signed

**Montpelier
District Heat**

Customer Agreement

October 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and N&M Real Estate (hereafter known as "Customer,"), currently having an address at 29 Church St. 3rd floor, Burlington, VT agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the New England Culinary Institute building located at 118 Main Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 375.1 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Jeff Nick
29 Church Street, 3rd Floor
Burlington, VT 05401

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month

July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month

July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 28th day of November, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

N&M Real Estate, LLC

By:

Jeff Nick

Date Signed

11/28/12

**Montpelier
District Heat**

Customer Agreement

October 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and River Street Associates, LLP. (hereafter known as "Customer,"), currently having an address at PO Box 1087, Montpelier, VT agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the 17 State Street building located at 17 State Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 163 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article I represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements

undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve and legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: Stephen Ribolini
PO Box 1087
Montpelier, VT 05601

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 - June 30, 2014: Capacity Charge Rate is \$4.77 per MBTUH per month
July 1, 2014 - June 30, 2015: Capacity Charge Rate is \$4.84 per MBTUH per month
July 1, 2015 - June 30, 2016: Capacity Charge Rate is \$4.91 per MBTUH per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 26th day of November, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

River Street Associates, LLP.

By: 

Stephen Ribolini, Authorized Agent

Date Signed

**Montpelier
District Heat**

Customer Agreement

November 2012

THERMAL ENERGY AGREEMENT

The City of Montpelier, Vermont, located at City Hall, 39 Main Street, Montpelier, VT 05602 (hereafter known as the "City") and Vermont Mutual Insurance Company (hereafter known as "Customer,"), currently having an address at 89 State Street, Montpelier, Vermont agree as follows ("Agreement"):

WITNESSETH

WHEREAS, Customer owns the building commonly known as the Vermont Mutual Insurance building located at 89 State Street in Montpelier (the "Building").

WHEREAS, The City is in the business of constructing and operating a district heating system (the "District Heating System," as defined in Section 5.1) that will deliver thermal energy generated primarily from biomass products at the State of Vermont heat plant in the Capital Complex; and

WHEREAS, The City desires that the District Heating System would provide thermal energy to the Building and other surrounding buildings in the downtown Montpelier area; and

WHEREAS, in contemplation of the City's construction and operation of such District Heating System, Customer has agreed to purchase thermal energy from the City for the Building for the term of this Agreement subject to the terms, contingencies, and conditions in this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I

CUSTOMER'S PURCHASE

1.1 Subject to the contingencies, terms, and conditions hereinafter set forth in this Agreement, including the "Uniform Provisions" (defined in Section 1.11), attached hereto and incorporated herein, Customer agrees to pay for and buy heat and hot water ("Thermal Energy") for the Building for the Term of this Agreement from the City.

1.2 The "System Completion Date", as used in this Agreement, shall be the date when construction of the District Heating System, defined in Section 5.1 of the Uniform Provisions, is substantially complete and the District Heating System is ready for service to Customer. The System Completion Date is currently anticipated to be on or before October 1, 2013.

1.3 The City shall make commercially reasonable efforts to meet the above currently anticipated System Completion Date.

1.4 "Customer's Completion Date", as used in this Agreement, shall be nine (9) months following the date Customer receives written notice from the City of the scheduled System Completion Date following commencement of construction of the District Heating System.

Customer shall complete the Building Conversion, as described in Section 4.1, on or before the System Completion Date.

1.5 Customer's "Initial Contract Capacity" for Thermal Energy, as referenced in this Agreement, is 1,100 Thousand British Thermal Units per Hour ("MBTUH"), based on an analysis by the City of past needs for heat in the Building and such other factors that the City believes should be taken into account. The Initial Contract Capacity attributable to Customer shall remain in effect up to and including April 30, 2016, unless it is modified in accordance with Article VI.

1.6 Customer's "Point of Delivery", as defined in Section 4.2, is that point as identified on Exhibit A attached hereto. The Customer will secure any necessary building permits or other necessary governmental approvals for any work on the property of Customer to extend service line pipes from the point where they enter the Customer's private property to the Customer's Point of Delivery through the footprint of the Building wall.

1.7 "Service Connection Charges" shall be as described in Section 5.4. Within twelve (12) months after the First Service Date (as defined in Article II), the City shall provide Customer with the Service Connection Charges applicable to Customer's Building.

1.8 The parties' obligations under this Agreement are expressly conditioned upon: (A) the City's obtaining all required governmental permits and approvals for construction of the District Heating System; (B) completion of construction of the District Heating System; and (C) a determination by the Montpelier City Council that the District Heating System will commence operations.

1.9 Customer agrees to rely on the District Heating System as Customer's exclusive supplier of Thermal Energy for the Building for the Term of this Agreement. In the event Customer has the capability to supply Thermal Energy to the Building from a source other than the District Heating System, it shall do so only pursuant to a written protocol with the City and only to supply needed standby Thermal Energy when the District Heating System does not have the capability to serve all of its customers.

1.10 Articles II through XXIV, "Uniform Provisions" of this Customer Agreement, shall, to the extent reasonably feasible, be identical for all customers. Customer acknowledges and represents that Customer has reviewed the Uniform Provisions and does, by execution hereof, incorporate the same herein and agrees to be bound by their terms and conditions. Provisions of this Article 1 represent unique Customer characteristics and shall supersede any inconsistent provisions of the Uniform Provisions.

1.11 This Agreement, including the Uniform Provisions, shall constitute the full understanding of the parties hereto with respect to the transactions contemplated hereby and shall supersede all prior oral or written negotiations or agreements. No amendment to this Agreement shall be valid unless it is in writing and executed by both parties hereto.

1.12 The person(s) executing this Agreement on behalf of Customer represent(s) and warrant(s) that, if Customer is a corporation, limited liability company or a partnership, the undersigned is/are duly authorized and empowered to execute and enter into this Agreement and obligate and bind Customer to this Agreement and the covenants, obligations, and requirements hereof. This Agreement shall be binding upon Customer's heirs, successors and assigns and upon all future owners of the Building. Customer shall assure that any new owner of the Building undertakes to perform all obligations herein.

1.13 The City's representative executing this Agreement represents and warrants that the representative is duly authorized and empowered to enter into this Agreement.

1.14 This Agreement is governed by the laws of the State of Vermont. The Parties agree that the State and Federal courts of Vermont shall have exclusive jurisdiction to hear and resolve any legal disputes relating to this Agreement that cannot otherwise be resolved by the Parties.

1.15 Notices from one party to the other shall be provided in accordance with Article XXIII and shall be addressed as follows:

IF TO CUSTOMER: William Catto
Vermont Mutual Insurance Company
P. O. Box 188
Montpelier, VT 05601

IF TO CITY: William Fraser, City Manager
City Hall
39 Main St.
Montpelier, VT 05602

1.16 For annual rate periods subsequent to the date of this Agreement and prior to July 1, 2016, Customer shall pay the city a "Capacity Charge" in each "Billing Period" (defined in Section 10.1) equal to the product of Customer's Initial Contract Capacity multiplied by the following applicable Capacity Charge Rates:

July 1, 2013 – June 30, 2014 Capacity Charge Rate is \$4.29 per MBTU/h per month
July 1, 2014 – June 30, 2015 Capacity Charge Rate is \$4.35 per MBTU/h per month
July 1, 2015 – June 30, 2016 Capacity Charge Rate is \$4.42 per MBTU/h per month
July 1, 2016 – June 30, 2017 Capacity Charge Rate is \$4.49 per MBTU/h per month
July 1, 2017 – June 30, 2018 Capacity Charge Rate is \$4.56 per MBTU/h per month

IN WITNESS WHEREOF, Customer and the City have executed and delivered this Agreement as of the 28th day of November, 2012.

City of Montpelier, Vermont

William Fraser, City Manager

Date Signed

Vermont Mutual Insurance Company

By:

Brian C. Eagan *CEV*
Brian C. Eagan,
Authorized Agent

11/28/12
Date Signed

William Fraser

From: Roman Piaskoski (1PME) [roman.piaskoski@gsa.gov]
Sent: Friday, August 31, 2012 3:19 PM
To: Harold Garabedian; Chuck Drury (1PME)
Cc: William Fraser; Gwendolyn Hallsmith; Waikit Lui (1PCS); Brian Wong; Timothy Shobbrook (1PSK); Thomas Eberhardt (1PSK); Walter Perez
Subject: Re: Status Call

Harold,

I can have our Contracting Officer, Chuck Drury, and myself available at 11:00 AM on Wednesday. I can not guarantee any other Team members from GSA but will try.

The "acquisition plan has been approved. The \$155,000 has been funded. We are prepared to contract for connection services and hot water supply. GSA as back -up to system may be off table, but can be revisited as well as the possibility of a capacity rebate on high demand days if it would be advantageous for GSA to drop off the District System, (lowering the demand/demand response).

In any case, negotiation will now be handled by and through Chuck as CO.

Roman Piaskoski
Branch Chief, Energy, Utilities & Environment
Public Buildings Service
GSA New England
O'Neill Federal Building
Boston, MA 02222

617.565.4693 ofc
617.893.0326 cell

On Fri, Aug 31, 2012 at 3:02 PM, Harold Garabedian <harold.garabedian@gmail.com> wrote:

Hi Roman –

This past week the City Council authorized the Montpelier District Project to move forward.

The next step is for the City to develop construction documents and develop the RFP to receive construction bids.

I would like to set you a call with you for next week, either Tuesday or Wednesday ideally. The purpose of the call would be for the City to update GSA on project Status and Schedule, GSA to update City on Procurement

Plan, have concurrence on design process for GSA building connection, review potential for GSA building being a source of “back-up” heat to the distribution system, and any other items that should be discussed.

If you let me know what works for you, I can coordinate on this end.

All the best on this holiday weekend.

-- Harold

Harold Garabedian

Energy & Environmental Analytics

132 Northfield Street

Montpelier, Vermont 05602 USA

tel: +1 802 595 5412

email: harold.garabedian@gmail.com

MEMORANDUM

TO: William J. Fraser, City Manager
FROM: Barney Bloom, Washington County Side Judge
SUBJECT: District Heat – Agreement
DATE: November 28, 2012

We have consulted with John Page (Montpelier attorney), and the County has agreed that the contract is acceptable. We have a few details we'd like to talk with you about and questions regarding financing, etc.

Other than that, we are ready to sign. I expect that my colleague will sign the Agreement by the end of the week.

Judge K. B. Bloom

MEMORANDUM

TO: William J. Fraser, City Manager
FROM: Barney Bloom, Washington County Side Judge
SUBJECT: District Heat – Agreement
DATE: November 28, 2012

We have consulted with John Page (Montpelier attorney), and the County has agreed that the contract is acceptable. We have a few details we'd like to talk with you about and questions regarding financing, etc.

Other than that, we are ready to sign. I expect that my colleague will sign the Agreement by the end of the week.

Judge K. B. Bloom



CITY OF MONTPELIER, VERMONT

- THE SMALLEST CAPITAL CITY IN THE UNITED STATES -

Mayor John Hollar

City Council:

Tom Golonka
Thierry Guerlain
Andy Hooper
Angela Timpone
Anne Watson
Alan Weiss

William Fraser,
City Manager

MEMORANDUM

To: Mayor Hollar & City Council Members
From: William Fraser, City Manager
Re: District Heat Contract Award Recommendation
Date: November 21, 2012

Recommendation: Authorize the City Manager to sign contracts with Kingsbury Construction from Waitsfield, Vermont.

Kingsbury's bid prices are \$3,432,296 for District Heat work, \$752,518 for service laterals, \$737,660 for Union Elementary School conversion and \$260,480 for water system improvements. The project price is within the project budget and funding. Laterals will be paid by customers as part of their connection costs. Union School work will only be done upon funding and authorization by the School Board. Water system work will be done as funds are identified.

Bids were received and opened for the District Heat Project on November 5, 2012. The City received two bids, one from Kingsbury Construction and one from Engleberth Construction. Kingsbury was the low bidder by \$510,596 for the full base project, low by \$248,911 on the complete conversion of Union Elementary school (to be paid by the school department), low by \$152,033 on the cost of laterals to buildings (to be paid by the building owners) and high by \$92,281 on related city water system work which was included so that it can be completed while the streets are open. Kingsbury was the overall low bid by \$909,259 and the low bid for direct city expenses by \$418,315. The detailed bid tabulations were provided on November 6th and are posted on the city's website.

Project Budget:

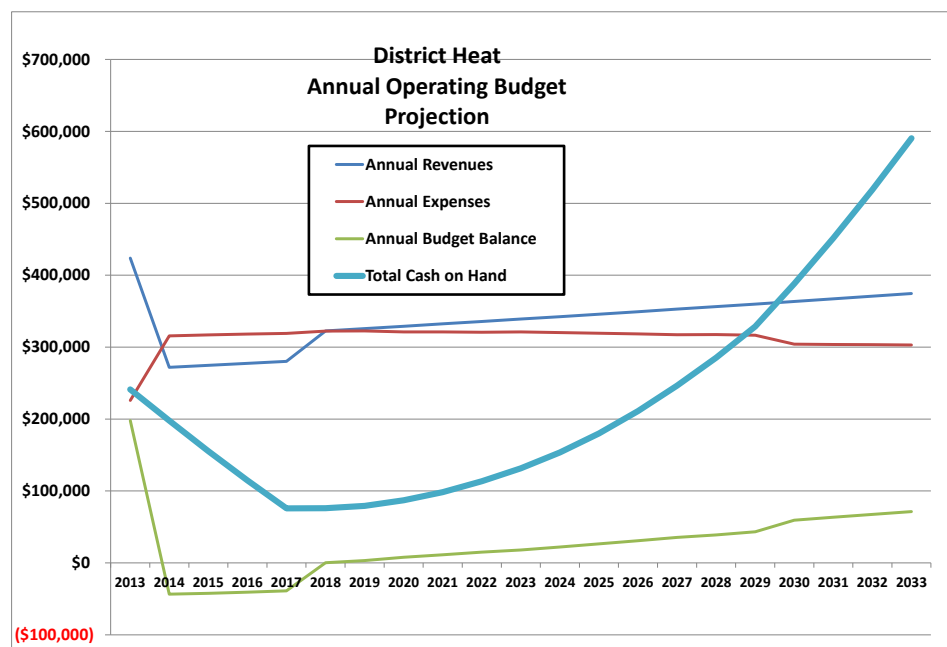
The costs for the direct district heat construction project are \$3,432,296 which compares with our estimate of \$3,306,063. Adding other project costs in brings the overall project to \$3,921,321 with total available funding of \$4,314,768. Our earlier estimate had looked at total project cost of \$3,732,337. While the bid price is slightly over the estimate it falls within both our contingencies and our available funding. With this project budget, we would be able to bond

for \$1.6 to \$1.65 million rather than the full \$2 million and would not need to use the Vermont Mutual upfront money for construction. This means we still have a total “hedge” of 13.9% of project funding.

Available Funds (detailed in earlier memos)	\$4,314,768	
Piping Costs (per bid)		\$2,166,778
Building Conversions (per bid)		\$320,498
General Conditions (per bid and engineer)		\$1,003,020
Sub Total Construction	\$3,490,296	
Other Direct Project Costs	\$431,025	
Total Project Costs	\$3,921,321	
Budget Balance	\$393,447	10.0%
Additional Cash Contingency	\$151,830	3.9%
Bond Required	\$1,606,553	

Operating Budget:

I have reworked the numbers using a \$1.65 Million bond, customers committed to date and current operating cost estimates. The updated financial projection is similar to the profile shared in August.



Customers:

The November 6th bids provided specific costs for connection laterals. Heat Exchangers and meters were bid separately. As a result of this, we are now able to provide much more accurate and building specific costs to building owners. In addition, the comprehensive contract agreements have been drafted and vetted. All of this information has been provided to customers with emphasis on those who signed earlier letters of commitment. Signed contracts are coming in now and, so far, no one has backed out of their initial interest. Projections are based on that customer group. We have received a signed contract from a new customer as well for both 15 and 17 State Street. We continue to receive new inquiries now that the system appears to be a reality and are meeting with several building owners over the next couple of weeks.

Status of State Construction – from the state’s consultant, Lawrence D. Copp:

The State has commissioned the manufacture of a biomass fueled boiler train complete with conveyance equipment, furnace, boiler, emissions and ash handling equipment—unloading bin to stack equipment. The purchase order was issued in late May 2012 and the vendor accepted that order shortly thereafter. The total for the P.O. is approximately \$5.0 million and a \$1.0 million payment was made at the time of the order.

As has been the case since we reached agreement in January 2012, the timeline has the State’s Heat Plant available for service October 2013. We do not expect any delay based on current events and assuming normal weather conditions through construction. We anticipate that physical construction will begin in March 2013.

The State’s engineering team is using a system called Submittal Exchange to track documents and communications between team members. Harold Garabedian, as the City’s representative, has access to those documents.

The current status can be summarized as follows:

1. The State’s engineering team and the equipment vendor (AFS Energy Systems) are deep into the detailed engineering and specification phase of the project. Site layouts and schematics have been finalized as of this date. The specifications of all major equipment items have been reviewed and finalized in preparation for permitting.
2. The State has retained a Construction Manager (CM) to oversee the installation of the boiler equipment and construction of the structure to house the facilities. The CM is Engelberth Construction.
3. The State’s engineering team and EverGreen EHS are well into the permitting process at this time. The Air Quality application was submitted this past week (11/12). The application is considered a “minor” application due to the relatively small amount of additional emissions resulting from the new boiler/furnaces as specified. The minor status nature of the permit application should expedite the air quality permit schedule.
4. The permit team has now moved to advancing the Act 250 application.
5. The Capital Complex Commission is scheduled to meet later this month to review final layouts, elevations, and material options that are being prepared by the architectural team as I write this summary. The final elevation and materials options are being prepared this and next week.

6. The longstanding project schedule has the State releasing AFS to manufacture the boiler train upon completion of the permitting cycle. The appropriate permits should be in-hand by the end of December or early January and manufacturing release will follow immediately thereafter. A more extensive project schedule is in preparation by the CM. That schedule will incorporate a more detailed flow of the construction.
7. There is no change in the budget and it is as reported earlier in July. A budget update will be undertaken in December.

I have attached a couple of items that may be of interest. These are: 1.) A copy of the most recent project schedule prepared by D&S Engineering, the State's engineer, and, 2.) the final site schematic showing the existing and proposed new building onsite. The schedule will also be updated in December. (Bill's note – I will share those referenced documents upon request, did not include them with this memo)

Status of Agreements with State:

The City and State reached agreement on contract language which would allow for phasing of the project although, based on the bids, such phasing does not appear to be necessary. The City and State also reached agreement on terms for possible third party operation of the district heat system.

Third Party Operation:

Between August and now, efforts have been directed into shaping the technical details and costs of the project, processing the bids, working with customers and getting the project ready for construction. After the contract is awarded, work will begin on developing an operating structure for the utility. This system is projected to be functional by October 1, 2013 which means that the operating plan must be in place before that date.

School Participation:

The School Board has reiterated their commitment to participating in the project. The bid included specific pricing (\$737,660) for conversion of the heating system at Union Elementary School. The Board will be presenting a bond vote in March for these building improvements. School officials, Kingsbury officials and City officials have met to work out scheduling of work and ordering of materials based on this pending vote. School officials understand that some cost commitments need to be made prior to March and said that they will assume responsibility for those costs. If the bond vote fails, the city retains the option of deferring construction of this segment of the system. There could be a net reduction in the annual operating pro forma without additional customer revenues to offset the school's impact. This change still falls within the "worse case scenario" option presented in August. In other words, city costs still be within the variance of fuel pricing when compared to the "do nothing" option.

Summary:

Based on the continuing detailed analysis of the system, the actual bid prices, work done to date by all parties and the general support for this project, I recommend awarding the contract and moving forward into the construction phase.

Montpelier Police Department

Operational Overview

November 27, 2012

The Montpelier Police Department is comprised of 17 full-time police officers, one administrative assistant, 6.5 FTE Emergency Services Dispatchers, and one full-time and three part-time Community Service Officers (Parking Division). The men and women of the MPD are focused on the core mission of providing police and public safety services to the citizens and visitors of Montpelier. In order to meet today's law enforcement challenges the department will continue to seek and retain the right personnel—those who are qualified and motivated to be here at MPD. The department will provide these officers and dispatchers with the necessary training and tools needed to meet the present and future public safety needs of the City.

Patrol:

The department provides 24hr police and communications services seven days a week. There is a minimum of two police officers on during any given shift and this is for safety reasons (day and evening shifts are usually staffed with a minimum of three officers). However, based on assignment and/or activity, Monday through Friday dayshift will have between six to eight police officers (counting chief, SRO, and detective); while the evening shift generally has four on—including the 7:00PM to 3:00AM officer (Tuesday through Saturday). By comparison, in areas covered by Vermont State Police, if a domestic call came in at 3:30 A.M., that would prompt a two trooper response, each coming from their respective residences, thus a substantial time delay occurs before help arrives. The next closest 24hr agency is the Barre City PD with similar shift coverage.

Activity on dayshift represents the highest number of calls for service, where the evening shift represents the bulk of proactive or officer generated activity. The midnight shift statistically has the least amount of activity, but the nature of some of the calls they handle can be the most dangerous. For instance, this year alone, two armed robberies of convenience stores occurred on that shift. Year to date the department has handled approximately 13,700 calls (including calls for service, proactive work, and special assignments/details such as court). Officers primarily patrol using cruisers, but they also conduct foot and bike patrol as well. Depending on future staffing, the department would like to see the department's bike patrol return to its former strength of three officers in the unit (we currently have only one assigned to bike patrol).

It is important for the department to maintain sufficient personnel levels in order to provide for emergency response to critical incidents such as the May flood event of 2011 and Tropical Storm Irene. The Montpelier High School had two scares this year where caller(s) advised of gunmen on route to the school. Each incident prompted a lock-down of the school and a tactical response by MPD—with seven to eight officers arriving on scene within minutes. Our response to the school was supported by additional resources from Berlin PD, WCSO, and VSP. In emergencies such as these, all personnel on duty, including the chief, detective, and SRO respond with the shift personnel to these situations.

In 2011, the department reintroduced a K-9 team, and they have been quite successful after approximately 15 months in service. The majority of the K-9's work has centered on drug interdiction, although "Jake" (MPD's K-9) is trained to track—both criminal suspects and missing people. The K-9 team's efforts have resulted in 23 drug arrests (MPD cases), 14 search warrants, and the seizure of

cocaine, marijuana, crack cocaine, heroin, ecstasy (MDMA), and hashish. Cash and firearms have also been seized as a result of the K-9 team's work. Additional drug cases were handled by other agencies or became part of federal investigations. The team had also successfully tracked and apprehended two burglary suspects, one of whom had fled the scene of a car crash after a police pursuit. The MPD K-9 team has also conducted numerous demonstrations for community groups and for school children.

The School Resource Officer (SRO) continues to be a valuable asset that has effectively supported the safety needs of the students and faculty in our schools as well as augmenting the department's investigative needs. The SRO has been instrumental in solving non-violent crime such as property crime, actively seeking restorative justice resolutions for young offenders, and supporting investigators from both MPD and the Vermont Department of Children and Families (DCF) with sexual assault and abuse cases.

The department has addressed all of the Matrix recommendations that were appropriate with the exception of promoting one of the sergeants to the rank of captain since the organizational structure is too flat. The current impediment to making this transition is financial, but options are being discussed to make this happen in the near future. It is important to note that the Matrix team agreed that the current number of officers (17) was appropriate for the department, based on activity and public safety needs. It is also important to note that there has been a dramatic increase in workload for the detective and the officers due to the sharp spike in sex crimes investigations, coupled with the intelligence and narcotics work in support of a multi-agency task force, and the other duties ranging from burglary and financial crimes, to death investigations.

Investigations:

The majority of criminal investigations are handled by patrol personnel, depending on the type of investigation and the training and experience of the case officer. For example, many of our officers have specialized training in areas such as death investigation, financial crime, child sexual abuse, and narcotics. The department has one full-time detective who has been primarily assigned to the Barre-Montpelier "Project Safe Neighborhoods" Task Force which is an Alcohol Tobacco and Firearms (ATF) program supported by the U.S. Attorney's Office. Due to a dramatic increase in reported child sex crimes in Montpelier, the department temporarily increased in size from 17 to 18 officers in the spring of 2012. This was done in order to assign temporarily a second detective to keep-up with the sex crimes and other complex investigations that needed to be addressed.

As a result of our close partnership with ATF, we have increased law enforcement capacity in the Montpelier area. So far, more than a dozen individuals have been indicted on federal drug and gun charges as a result of our cooperative efforts. Officers and agents from MPD, BCPD, DEA, ATF, and the VT Drug Task Force have disrupted trafficking rings involving kilos of crack cocaine, heroin, and diverted prescription narcotics that are being distributed into the Barre-Montpelier area. The prevalence of firearms with the drug trade in this region is of paramount concern to our officers, and ultimately the community. Much of this work was initiated as the result of a drug related shooting, here in Montpelier back in November 2011.

Another important function of police investigations is criminal intelligence and analysis. The department has come a long way with improving the robustness of our intelligence and analysis thanks to the cooperation of our colleagues at the local, state, and federal level. The department has also worked with Norwich University, who has supported law enforcement at various levels and in multiple states with its qualified staff expertise in digital forensics. Public/private cooperative ventures with

vetted partners further serves as a force multiplier for local law enforcement--especially during fiscally challenging times such as these.

Although it is another legislative unfunded mandate, the MPD has been actively involved with the organization and support of the Washington County Special Investigative Unit (SIU). Per state statute (Brook Bennett legislation) each county needed to have an SUI, coordinated by the State's Attorney's Office. Central to Washington County's SIU is OUR House, an advocacy and support organization for the protection of children and the investigation of child sexual and other serious abuse. MPD, BCPD VSP, Washington County State's Attorney's Office (WCSA), DCF, and OUR House have taken lead roles in the SIU. The SIU is one part of the Multi-Disciplinary Team that also includes advocates from the SA's office, medical community, mental health community, Circle (formerly Battered Women's Services), and the sexual assault crisis team (SACT), and OUR House.

Training:

Training is a critical aspect of modern policing. It is imperative that officers stay current in criminal law, juvenile law, liability issues related to policing, evidence (collection and maintenance), technology, weapons and tactics, interacting with vulnerable populations, first aid/CPR, emergency vehicle operation, critical incident management, and training on departmental policies. For the last five years, the department has instituted rigorous training requirements for all officers in high-risk areas such as use of force, legal training, and vehicle operation. This is part of the department's risk management approach to training which focuses on high-risk –low frequency incidents. The goal here is to train better our officers which helps to maintain our culture of excellence, improve our policing capacity, keeps both the officers and citizens safer, while minimizing the City's liability risks. These efforts have gained the positive attention of the VLCT, our Federal partners, and our local law enforcement peers who we have shared some of this training with. The department does as much training internally as it can, utilizing "in house" academy certified instructors when possible. However, it is common for our officers to travel around the state or even out of state to attend certain trainings, all of which adds to the cost, therefore we are careful in our selection of classes and assessing officer and departmental needs.

The following list includes some of the training completed by MPD personnel in 2012: Scenario based "force on force" training including policy issues, forensic interviewing, criminal intelligence, active shooter response, combat first aid, bicycle/pedestrian safety, FBI explosives training, legal training, social networking for the criminal investigator, water rescue and safety awareness, day and night firearms qualifications (quarterly), supervisor/leadership training, homeland security, vehicle operation, mental health/crisis intervention, and investigating sexual and domestic violence. All of this training is directly applicable to the duties and responsibilities of the department.

Statistical highlights comparing crime/incidents YTD with 2007 (Jan 1 to Nov. 26, 5yr increment):

Crime/Incident	2012	2007
Robbery	3	1
Burglary	29	54
Simple Assault	18	26
Assault on Police	5	8
Disturbance calls	254	325
Death Investigations	12	7
Mental Health calls	152	204
Shoplifting	35	23
M/V theft	5	12
Vandalism	81	172
Sex assaults	28	9
Detox/Incap*	54	58 (*Mplr has the highest rate in Washington County-WCMH)

Communications (Dispatch):

The MPD Dispatch is a regional dispatch center that has two contracts, one with the Capital Police (State House), and the other with Capital Fire Mutual Aid (Capital West) which is an organization representing fire and EMS serving 19 communities. The following Vermont communities are served by the MPD Dispatch:

Montpelier, E. Mplr, Berlin, Northfield, Roxbury, Plainfield, Cabot, Marshfield, Worcester, Middlesex, Walden, Waterbury, Duxbury, Moretown, Bolton, Waitsfield, Fayston, Calais, and Woodbury.

The department's dispatch handles approximately 20,000 incidents per year. The dispatchers are quite frequently a citizen's first point of contact with public safety services, but they also field general questions as well including after-hours calls for DPW or simple questions such as "what time does the parade start?" Because anything can happen, either in the lobby of the station or on the other end of phone call, MPD dispatchers receive training in interacting with individuals experiencing a mental health crisis (MPD was the first PD in the State to require this police level training for dispatchers), critical incident dispatching, and all maintain CPR/first aid certifications. The dispatchers and officers must go through annual National Crime Information Center (NCIC) trainings and certifications, which is required by both the state (VCIC) and the FBI. Additionally, there are environmental standards for the dispatch center itself, which must be in compliance with federal regulations (computer use security policies, computer encryption, security screens on monitors, approved network diagrams and firewalls, etc.).

Activity within the dispatch center can fluctuate greatly. This roller-coaster of quiet time, which can suddenly turn chaotic—even tragic, can and has taken a toll on even the most seasoned dispatchers. Making sure all personnel are mentally prepared to do the job they do is an ongoing challenge for management staff. Critical incident debriefs are an important part to this process as well as the learning opportunities that post incident reviews can present.

In addition to the community support and public safety mission of dispatch, they also provide clerical support to both police and parking division functions of the department. They also monitor the security cameras located in City Hall and the police station.

Dispatchers are the lifeline for our citizens and for our police officers.

Parking Division:

Parking enforcement is primarily accomplished utilizing one full-time and three part-time CSOs. One of the CSO's duties is focused on parking meter maintenance (we have nearly 400 meters around town) and five permit vending machines. Police officers also issue parking tickets and they are the ones tasked with winter ban parking enforcement and applying the "boot" onto vehicles when owners have past due parking violations. Dispatch has parking duties as well which include updating late notices, and data entry utilizing parking specific computer applications. Certain sergeants are assigned duties related to supervision and direction of parking enforcement personnel.

Because both police and dispatchers are so involved with both enforcement and the administration of the parking division, a percentage of general fund expenditures for police and communications is offset by the parking fund. It is this ratio that can adversely impact the bottom line of the parking fund, which by itself, should never be negative, less for years involving substantial capital improvements. This is an area of concern for the chief and it will be re-evaluated in the near future along with looking at potential revenue increases, particularly with the parking permit rates.

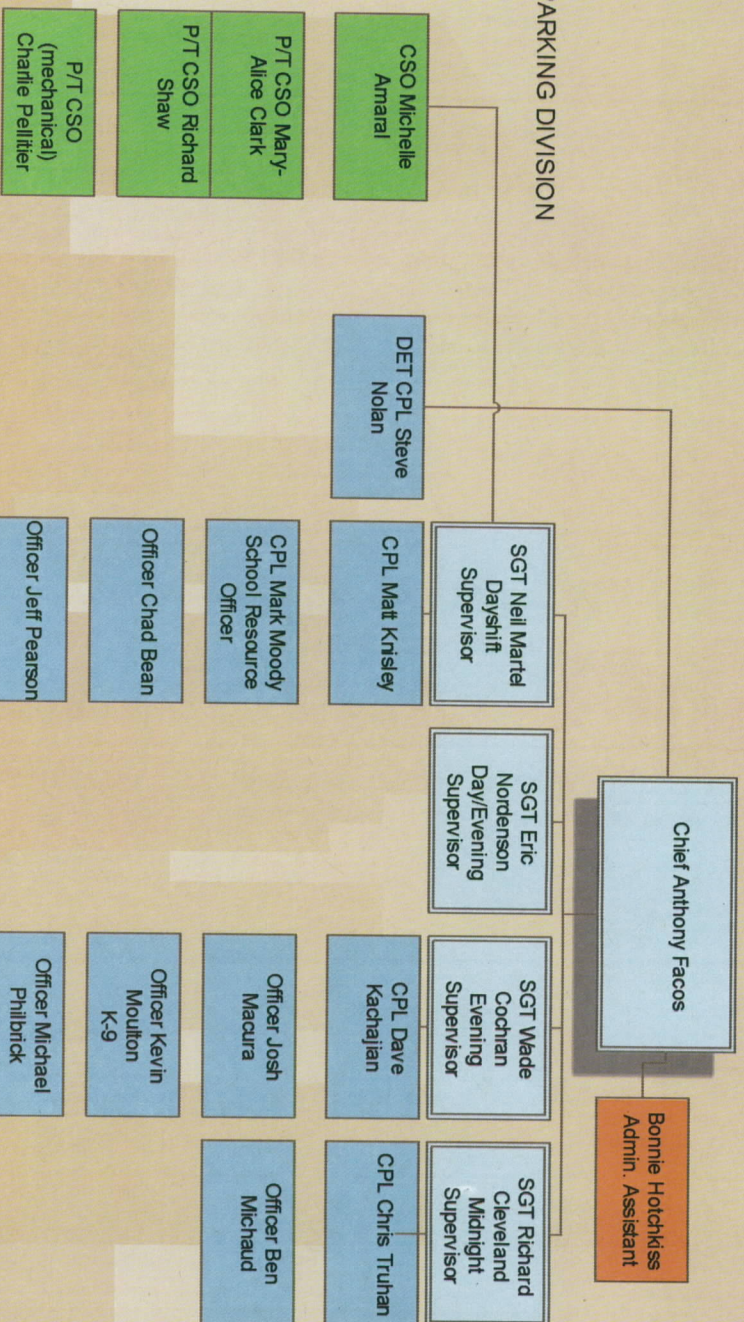
MONTPELIER POLICE DEPARTMENT

MISSION STATEMENT

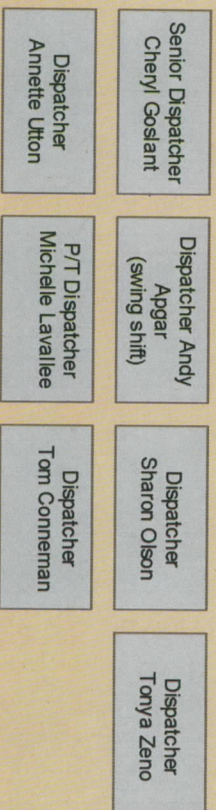
The ultimate responsibility for peace, good order, and law enforcement rests with the community of citizens in a democratic society. The complexity of modern society dictates that police efforts must be coordinated and directed by the services of law enforcement professionals.

Therefore, the Montpelier Police Department will be devoted to providing professional and quality police services, and will strive to remain effective, efficient, and responsive to the changing needs of our community while providing a safe environment that enhances the quality of life in Montpelier.

PARKING DIVISION



DISPATCH COMMUNICATIONS



Dispatchers are under the direct supervision of the police shift supervisors

MONTPELIER POLICE DEPARTMENT

DEC/JAN 2012/2013	1 1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2 1	2 2	2 3	2 4	2 5	2 6	2 7	2 8	2 9	3 0	3 1	1	2	3	4	5	6	7
0001-0800	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
CLEVELAND SGT						0	0						0	0						0	0						0	0
TRUHAN CPL 2200-0800	0	0	0					0	0	0					0	0	0					0	0	0				
PHILBRICK				0	0						0	0						0	0						0	0		
NORDENSON SGT	0	0				1 6	1 6	0	0				1 6	1 6	0	0				1 6	1 6	0	0					
0800-1600	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
MARTEL SGT				0	0						0	0						0	0						0	0		
BEAN					0	0						0	0						0	0						0	0	
PEARSON						0	0						0	0						0	0						0	0
KNISLEY CPL				0	0					0	0							0	0						0	0		
WHITE		0	0						0	0						0	0						0	0				
NOLAN Det.					0	0						0	0						0	0						0	0	
MOODY SRO					0	0						0	0						0	0						0	0	
1600-2400	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
COCHRAN SGT						0	0						0	0						0	0						0	0
KACHAJIAN CPL	0						0	0					0	0						0	0						0	
MOULTON		0	0						0	0						0	0						0	0				
MACURA					0	0						0	0						0	0						0	0	
MICHAUD 1900-0300						0	0						0	0						0	0						0	0

Montpelier Police Department

General Duties and Areas of Responsibilities

- I. Control and Reduction of Crime
 - A. Prevention – Suppression
 - B. Investigation – Apprehension
 - C. Prosecution
 - D. Recovery of Property/Evidence
 - E. General support
 - F. Death Investigation
 - G. Foot and Mountain Bike Patrol
 - H. School Resource Officer
 - I. Tactical Response to Violent Crime and Armed Threats
 - J. Crisis Intervention

- II. Movement and Control of Traffic
 - A. Traffic Movement
 - B. Traffic Safety
 - C. Accident Investigation
 - D. Enforcement
 - E. Parking Division
 - 1. Enforcement
 - 2. Education
 - 3. Maintenance

- III. Maintenance of Public Order
 - A. Public Events
 - B. Minor Disturbances
 - C. Civil Disorder
 - D. Anti-Terrorism

- IV. Provision of Public Service
 - A. Disaster Preparedness/Response/Mitigation/Recovery
 - B. Missing Persons
 - C. Lost/Found Property
 - D. Misc. services

- V. Administration and Support
 - A. Direction and Control
 - B. Training and Personnel
 - C. Fiscal Management/Grants
 - D. Risk Management
 - E. Public Relations

Montpelier Police Department Communications Dispatch Center

I. Emergency Service Dispatching

- A. Call taking and dispatching for Montpelier Police Services
- B. Contract dispatching service for Capitol Police (State House)
- C. Contract dispatching for Capital West (Capital Fire Mutual Aid group) which includes the following emergency service providers:

Fire Departments

Berlin FD, Bolton FD, Cabot FD, East Mplr FD, Marshfield FD, Middlesex FD, Montpelier FD, Moretown FD, Northfield FD, Plainfield FD, Roxbury FD, Waterbury FD, Waitsfield FD, Woodbury FD, Worcester FD, Walden FD

FAST Squads

East Mplr FS, Middlesex FS, Plainfield FS, Woodbury FS, Worcester FS, Walden FS

Ambulance Services

Barre Town EMS (for CFMAS towns), Cabot Ambulance, East Mplr Ambulance, Montpelier Ambulance, Waterbury Ambulance, Northfield Ambulance

- D. Maintain ongoing training goals in support of quality service delivery. Focus on effective Critical Incident Dispatching for incident commanders in the field.
- E. VLETS/NCIC records inquiries and submissions

II. First Point of Contact and Reception to the Police Department

- A. Information exchange to the general public
- B. Take initial information on complaints
- C. Crisis Intervention
- D. Referral/Dispatch to appropriate police response
- E. Log and dispatch for court ordered check-ins
- F. Community service support and referral

III. Clerical Support Services

- A. Assist officers with criminal case preparation
- B. Assist with parking tickets records management
- C. General filing—records management
- D. Police station and City Hall security system monitoring
- E. Recording court dispositions

Total Number of Crimes By Town: 2010 (CLICK ON COUNTY TO SEE TOWN DATA)

Current date: 11/21/2012 1:50:31 PM

Measures	Number of Offenses	Offense Rate (per 1,000)
Incident Date	2010	2010
Jurisdiction		
Barre City	634	71.20
Barre Town	242	30.29
Berlin	110	38.98
Cabot	32	24.21
Calais	15	9.75
Duxbury	17	12.93
East Montpelier	31	11.48
Fayston	22	17.67
Marshfield	28	17.42
Middlesex	33	17.68
Montpelier	599	76.74
Moretown	18	10.44
Northfield	224	38.97
Plainfield	33	24.46
Roxbury	12	21.62
Waitsfield	52	30.99
Warren	45	26.00
Waterbury Town	119	22.25
Woodbury	19	23.46
Worcester	6	6.93

from chg code: ALL from arrest date: 01/01/12 from off: ALL fr geo: ALL
to chg code: to arrest date: 11/21/12 to off: to geo:
sort by: CODE (A)dult (J)uv: ALL arr/chg typ: ALL
arr/chg grp: ALL

totals	chg cd	arr chg	grp	statue	description
----	----	typ	----	-----	-----
26	FA	A		VRCP P.4 4(D)	FAIL APPEAR FOR COURT
3	RA	A		13 VSA 3017	RESISTING ARREST
1	16B	A		7-VSA-656 (A) (2)	MINOR IN POSSES OF ALCO
3	23P	A		13-VSA-2582 (A)	THEFT OF SERVICES
2	26H	A		13-VSA-2030	IDENTITY THEFT
1	370	A		13-VSA-2824	POSSESSION CHILD PORNOGRAPHY
3	DUI	A		23VSA 1201(A) (3)	DRIVING UNDER INFL DRUGS
2	ED3	A		13-VSA-1753 (B) (2)	FALSE ALARM/UNDERAGE/1ST
1	GEN	A		CHAP 1 MPLR	VIOLATION OF CITY ORDINANCES
1	INH	A		TITLE 18 VSA 1510	GLUES/HAZARDOUS INHALANTS
4	MCA	A		7-VSA-657 (A) (3)	MINOR CONSUMED ALCOHOL
2	RSP	A		13-VSA-2561	RECEIVING STOLEN PROPERTY
2	VAG	A		T13VSA3902	VAGRANCY
1	100D	A		13-VSA-2407	UNLAWFUL RESTRAINT (1ST)
2	11A0	A		13-VSA-3252	SEXUAL ASSAULT
1	13A0	A		13-VSA-1024	AGGRAVATED ASSAULT
2	13A1	A		13-VSA-1043	DOMESTIC ASSAULT 1ST DEGREE
4	13B0	A		13-VSA-1023 (A) (1)	SIMPLE ASSAULT
6	13B2	A		13-VSA-1028 (A) (1)	SIMPLE ASSAULT (OFFICER)
13	13B3	A		13-VSA-1042	DOMESTIC ASSAULT
1	13C2	A		13-VSA-1062	STALKING
2	1550	A		13-VSA-1027 (a)	HARRASING TELEPHONE CALLS
11	1621	A		23-VSA-1128	LEAVING SCENE OF ACCIDENT
3	1780	A		23-VSA-1133	ATTEMPTING TO ELUDE
5	1790	A		23-VSA-1091 (a)	CARELESS & NEGLIGENT
2	1791	A		T23 VSA 1091 (b)	C&N GROSS NEGLIGENCE
33	1800	A		23-VSA-674 (a)	DRIVE WHILE LICENSE SUSPEND
5	2201	A		13-VSA-1201	BURGLARY (RESIDENCE)
8	2300	A		13-VSA-2502	PETIT LARCENY
1	2300	W		13-VSA-2502	PETIT LARCENY
1	2301	A		13-VSA-2501	GRAND LARCENY
17	23C0	A		13-VSA-2575	RETAIL THEFT
1	2500	A		13-VSA-1801	FORG./CTRFT. OF DOCUMENTS
1	2501	A		13-VSA-1802	UTTERING A FORGED INSTRUMENT
1	2700	A		13-VSA-2531 (9)	EMBEZZLEMENT
12	2900	A		13-VSA-3701	UNLAWFUL MISCHIEF
1	2900	W		13-VSA-3701	UNLAWFUL MISCHIEF
3	3040	A		13-VSA-3001	IMPEDING A POLICE OFFICER
1	35A0	A		18-VSA-4231	POSS REGULATED DRUG (COCAINE)
22	35A1	A		18-VSA-4230 (a) (1)	POSS REGULATED DRUG (MARIJ)
1	35A2	A		18-VSA-4230 (b)	SALE REG DRUG-MARIJUANA
2	35A6	A		18-VSA 4233	POSSESSION REG DRUG (HEROIN)
4	35A7	A		18-VSA 4234	POSSESSION DRUG
1	35A8	A		18-VSA 4235	POSSESSION DRUG (HALLUCIN)
2	35B1	A		18-VSA-4234a	POSSESSION OF A DRUG
3	35B2	W		18-VSA-4234b	SALE OF A DRUG
3	36Z0	A		13-VSA-2602	LEWD & LASCIVIOUS CONDUCT
1	36Z1	A		13-VSA-2601	LEWD & LASCIVIOUS

from chg code: ALL from arrest date: 01/01/12 from off: ALL fr geo: ALL
to chg code: to arrest date: 11/21/12 to off: to geo:
sort by: CODE (A)dult (J)uv: ALL arr/chg typ: ALL
arr/chg grp: ALL

totals	chg cd	arr chg typ	grp	statue	description
1	4400	A		13-VSA-352 (A)	CRUELTY TO ANIMALS
49	4950	A		13-VSA-7559 (e)	CONTEMPT OF COURT (COND)
3	4950	W		13-VSA-7559 (e)	CONTEMPT OF COURT (COND)
6	4960	A		13-VSA-1030	VIOLATION TRO
1	497A	A		28-VSA-301 (2)	VIOLATION PROBATION/PAROLE
1	5540	A		13-VSA-4953	FUGITIVE FROM JUSTICE
1	5540	W		13-VSA-4953	FUGITIVE FROM JUSTICE
3	90A0	A		13-VSA-2022	BAD CHECK
1	90A0	W		13-VSA-2022	BAD CHECK
16	90C0	A		13-VSA-1026 (9)	DISORDERLY CONDUCT
39	90D0	A		23-VSA-1201 (A) (2)	DRIVING WHILE INTOXICATED
2	90D2	A		23-VSA-1205	DRIVING INTOXICATED REFUSAL
8	90G0	A		7-VSA-658 (A) (1)	FURNISH MALT BEVERAGE
14	90G1	A		7-VSA-657	POSS MALT BEVERAGE
6	90G2	A		7-VSA-658 (A) (2)	ENABLING-CONSUMPTION BY MINR
7	90J0	A		13-VSA-3705	UNLAWFUL TRESPASS
2	91A0	A		13-VSA-2002	FALSE TOKEN
3	91A1	A		13-VSA-2001	FALSE PERSONATION
1	INTF	A		TITLE 13-VSA1031	INTERF ACCESS EMERG SERV
1	WEAP	A		T 13 VSA 4004	WEAPONS IN SCHOOL
1	CHINS	A		33-VSA-5302	CHILD IN NEED OF SUPERVIS
1	IMPER	A		T13,VSA 3002	IMPERSONATING POLICE OFFICER

395 <report totals> # INDIV ARRESTED: 307

SEX	RACE	AGE
male = 231	white = 282	adult = 273
female = 75	black = 5	juven = 34
ukn = 1	ind am = 0	ukn = 0
	asian = 2	
	hispanic = 3	ETHNIC
	mid east/ind = 1	
	ukn = 14	hispanic = 2
		non = 276
		ukn = 29

Public Safety Authority

Committee Report #3

Focused on

Cost Sharing Formula

Report Submitted by:

Patti Lewis, Berlin

Alan Weiss, Montpelier

Tom Golonka, Montpelier

Paul McGinley, Barre Town

Allan Heath, Barre Town

Dona Bate, Central VT Chamber

George Malek, Central VT Chamber

November 15, 2012

Background

In the exploration of potential for a four-town Public Safety Authority:

Create a public safety authority that provides the municipalities with an affordable, integrated, efficient system of public safety services (fire, police, ambulance, dispatch) that protects public welfare and provides rapid responses with highly qualified personnel when emergency situations arise

The Committee identified the following elements as critical to making a positive recommendation to proceed:

- Value through improved service or improved cost containment or both,
- A suitable governance structure,
- A workable formula for the sharing of costs,
- A workable, affordable public safety system design,
- A transition plan for movement to the new design, and
- A timeline for execution.

The Committee also recognized that no individual component can be finalized until all key components can be integrated into a single comprehensive recommendation.

Governance

The Committee issued its first formal report in March, 2010 describing its suggested governance structure and plan for addressing additional elements. The governance statement, recently reaffirmed, is restated below:

Each town appoints or elects one governor and the collective residents of the municipalities elect three other governors at-large. These seven governors are the sole policy and decision-making body for the Public Safety Authority, a governmental unit with its own charter or bylaws.

The Public Safety Authority will govern, as a single entity, all of the services under its jurisdiction and assess participating municipalities accordingly. Municipalities not fully participating in (and funding) all services cannot be considered participants in the Public Safety Authority and will not appoint governors nor participate in the election of governors.

However, the Authority would have the power to contract with non-participating towns to provide specific services when useful and prudent.

System Design

Following the first report, the Committee has divided its attention between system design and cost-sharing formula. It hired outside professionals to aid its work in both areas. It also modified the timeline as the complexity of each became increasingly evident.

While Barre City and Montpelier operate police, dispatch, fire and EMS services with full-time staff, Berlin and Barre Town rely on call firefighters. Barre Town contracts for dispatch, and Berlin purchases some dispatch services while enjoying other dispatch without charge, courtesy of the state police. Berlin's free dispatch can be expected to end at some point in the future.

Although many options remain open, the Committee anticipates that under a Public Safety Authority, full-time firefighting staff and full-service dispatch would be expanded to the entire service area, thereby providing greater service improvements to Berlin and Barre Town than to Barre City and Montpelier.

By the time the Committee issued its second report to municipal officials in Nov. 2011, the Committee had secured enough information to conclude that a public safety system providing 24-hour emergency response could likely succeed with staffing levels comparable to those currently serving the four towns. However, it was not likely to be effective with substantially fewer employees than currently employed.

The Committee found that having all employees under one management team could improve service by providing greater flexibility in the assignment of staff, responding more quickly when additional resources are needed, expanding opportunities for staff training, specialization and advancement, and contain costs by right-sizing shifts and reducing overtime.

Cost Sharing

The strong likelihood of improved training and response capability without a significant increase in staff satisfied the Committee's preliminary system design assessment and allowed its members to focus exclusively on the issue of cost sharing.

A workable formula for the sharing of future operating costs had to precede a more detailed (and expensive) examination of system design.

(Note: The Committee recognizes that capital costs, both facilities and equipment, are an important component of total costs. It has chosen, however, to postpone more detailed analysis of these asset values or cost items while considering formula development.)

An acceptable cost-sharing formula has to closely approximate the current division of expenses at the outset. Then, it must evolve over time to reflect the additional services being provided to Barre Town and Berlin.

For the past several months, the Committee has focused almost exclusively on the cost-sharing formula. The bulk of this report presents the Committee's findings and its belief that a workable formula can be established as the Public Safety Authority is created.

The Committee believes that it has identified a suitable process and a framework. It is, however, a framework, not the simple, straightforward calculation based on readily available data that the Committee had hoped to identify.

The purpose of this section is to present the Committee's process and framework to municipal officials.

The Committee's rough estimate of the combined public safety expenditures of the four municipalities is in excess of \$13 million. The municipalities receive more than \$4 million in revenues offsetting a portion these costs, primarily from ambulance charges and/or service contracts. Net cost has been estimated at about \$8.7 million.

Under any operational structure the Committee can envision, Berlin and Barre Town will enjoy the most significant improvement in emergency response. The Committee has pursued a cost-sharing formula that would reflect these enhanced services and then change slowly over time to further reflect evolutionary changes in demographics. The Committee also recognizes that a dramatic change at any point would be a significant burden to taxpayers.

With the assistance of Matrix Consulting Group, Committee members examined a wide range of metrics used in various multi-jurisdictional entities nationwide. Various formulae are applied to selected measures to produce the cost sharing models used by each jurisdiction. Examples are included in tables in the appendices.

The only metric that will emulate the current division of costs is to actually calculate those cost breakouts over a three-year period, and to then use that breakout as one of the elements in the formula.

After thorough investigation and exploration of several avenues, the Committee has concluded that ultimately a workable formula can be created by combining a "readiness" component with a "service fee" (a demand for service) component.

"Readiness" is reasonably straightforward. Possible metrics for a readiness component included a flat fee per municipality, per road mile, per structure, per resident, or per dollar of grand list, etc. **The Committee concluded that population provided the best basis for its readiness component.**

With "Readiness" taken into account, the remaining portion of operating costs comes from actual calls for service. Services include fire calls, ambulance runs, police responses and the dispatching required for all three. There was consensus that a portion of the cost sharing should be based on requests for and consumption of such services. However, the Committee found current data inadequate or incomplete.

Matrix Consulting Group reported, for instance:

Each of the Police and Fire Chiefs were asked to provide data for Calls for Service. As such, most individuals strictly provided a number without going into detail regarding which calls were excluded and which were included in that statistic. The project team was not in a position to audit the consistency of definition of calls among the agencies nor the accuracy of their reports of workload. Exception: The Barre Town Fire Department only provided the number of emergency responses.

In Summary

- 1) The Committee believes that a weighted cost-sharing formula with a 50 percent per capita “readiness” component in combination with “service” components based on police and fire utilization is workable.
- 2) The sharing of cost would initially be calculated using a detailed analysis of each municipality’s net costs as a percentage of the total net costs of the four towns over a period of three years. These cost-sharing percentages would then be used unchanged for the first three years of operation as an Authority while service data is standardized, collected, compiled and analyzed.
- 3) Service data would be compiled in multiple-year averages when used in the formula so as to minimize fluctuations from one year to the next.
- 4) At the end of budget-year three, the Authority would begin a measured three-year transition from the original percentages to the new cost-sharing formula, making adjustments in the weighted percentages to maintain a cost-sharing trajectory reasonably parallel to the one illustrated.
- 5) The Committee urges municipal officials to embrace the target and process presented in lieu of a concrete cost-sharing formula as the Committee continues to pursue other key information and recommendations necessary to creating a regional Public Safety Authority.

Again, please keep in mind, that the suggestion on this element cannot be viewed as final until all key components can be integrated in a single comprehensive recommendation.

Attachments:

Appendix A – Committee illustration of the proposed formula and transition based on the data collected by Committee members and Matrix.

Appendix B – Matrix Status Report #2 on reliability of Calls for Service.

Appendix C – Revised (aggressive) target timeline.

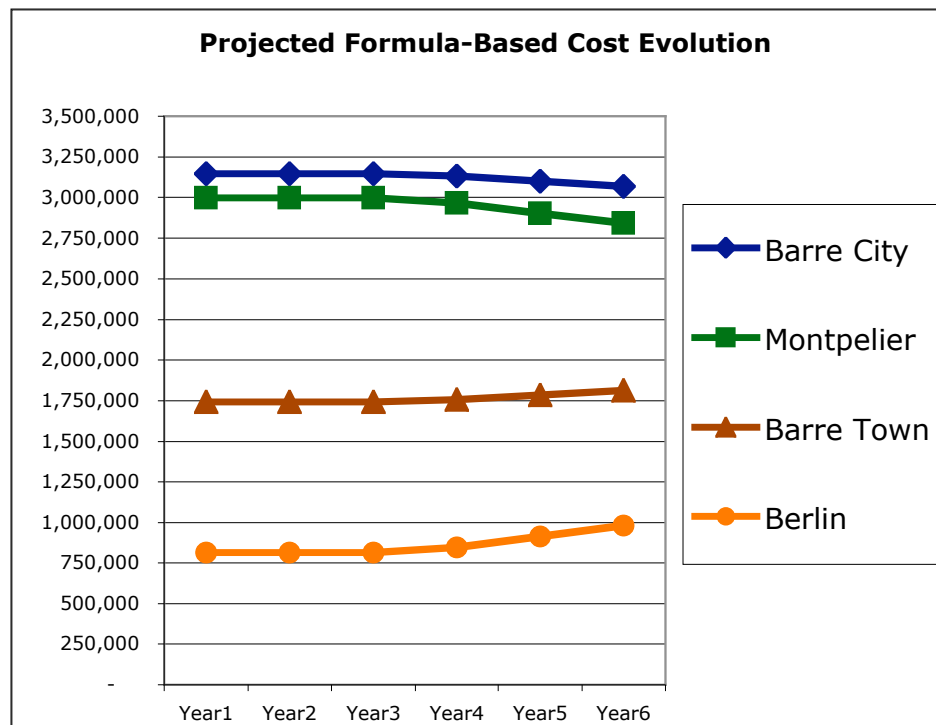
APPENDIX A-1

Seeking an appropriate formula

Again, one of the challenges to finding an acceptable cost-sharing formula was to find one that comes close to maintaining the current division of expenses but reflects the additional and improved services to Barre Town and Berlin.

Although the data are not reliable, fire and police calls seem to follow the desired pattern. When combined with population – a per-capita measure commonly incorporated in inter-municipal contracts, the resulting formula is very promising.

The chart below (based on current data estimates) illustrates how current costs would shift over the six-year phase-in period. The formula is constructed to allocate percentages of total net costs, so any overall savings would be shared equally (percentage-wise) as would any increases in cost for inflation or additional service enhancements.



	Year1	Year2	Year3	Year4	Year5	Year6
Barre City	3,146,769	3,146,769	3,146,769	3,130,771	3,098,775	3,066,780
Montpelier	2,996,596	2,996,596	2,996,596	2,965,187	2,902,367	2,839,548
Barre Town	1,741,373	1,741,373	1,741,373	1,755,922	1,785,021	1,814,119
Berlin	815,216	815,216	815,216	848,074	913,790	979,507

Appendix A-2

The Table on the previous page is derived from the percentages below that transition from the current division of costs (in years 1-3) to total elimination of the current division of costs by gradual transition (over years 4-6). Weighting changes shift the current division of costs to the new cost-sharing formula that is based on population and service calls.

Six-Year Implementation of Weighted Percents

Based on current estimates: town portion of net expenses						
Weighted %		BarreCity	BarreTown	Berlin	Montpelier	Total
YEAR #1						
100	Current Net Cost per Town	36.2%	20.0%	9.4%	34.4%	100%
0	Fire Calls	0.0%	0.0%	0.0%	0.0%	0%
0	Police Calls	0.0%	0.0%	0.0%	0.0%	0%
	Total	36.2%	20.0%	9.4%	34.4%	100.0%
YEAR #2						
100	Current Net Cost per Town	36.2%	20.0%	9.4%	34.4%	100%
0	Fire Calls	0.0%	0.0%	0.0%	0.0%	0%
0	Police Calls	0.0%	0.0%	0.0%	0.0%	0%
	Total	36.2%	20.0%	9.4%	34.4%	100.0%
YEAR #3						
100	Current Net Cost per Town	36.2%	20.0%	9.4%	34.4%	100%
0	Fire Calls	0.0%	0.0%	0.0%	0.0%	0%
0	Police Calls	0.0%	0.0%	0.0%	0.0%	0%
	Total	36.2%	20.0%	9.4%	34.4%	100.0%
YEAR #4						
80	Current Net Cost per Town	28.9%	16.0%	7.5%	27.6%	80%
5	Fire Calls	1.7%	0.5%	0.7%	2.1%	5%
5	Police Calls	2.1%	0.7%	0.6%	1.6%	5%
10	Population	3.2%	2.9%	1.0%	2.8%	10%
	Total	36.0%	20.2%	9.7%	34.1%	100.0%
YEAR #5						
40	Current Net Cost per Town	14.5%	8.0%	3.7%	13.8%	40%
15	Fire Calls	5.1%	1.6%	2.0%	6.3%	15%
15	Police Calls	6.4%	2.1%	1.7%	4.8%	15%
30	Population	9.7%	8.8%	3.1%	8.5%	30%
	Total	35.6%	20.5%	10.5%	33.4%	100.0%
YEAR #6						
0	Current Net Cost per Town	0.0%	0.0%	0.0%	0.0%	0%
25	Fire Calls	8.5%	2.7%	3.3%	10.5%	25%
25	Police Calls	10.7%	3.5%	2.8%	8.0%	25%
50	Population	16.1%	14.6%	5.1%	14.1%	50%
	Total	35.3%	20.9%	11.3%	32.6%	100.0%

Individual rows or columns may not total due to rounding.

Appendix A-3

Base Data & Percentages

Committee Estimate of Current Net Cost per Municipality

Central Vermont Public Safety Committee

November 3, 2011

Current Expenditures - PSA Committee Estimate 11/11

	Barre City	Barre Town	Berlin	Montpelier	TOTALS:
REVENUES					
POLICE REVENUE	380,354	72,075	129,460	924,503	1,506,392
DISPATCH REVENUE	59,000	-	-	144,693	203,693
FIRE/EMS REVENUE	709,300	1,528,000	-	409,966	2,647,266
	1,148,654	1,600,075	129,460	1,479,162	4,357,351
EXPENSES					
POLICE EXPENSES	2,085,673	780,000	782,416	2,237,053	5,885,142
DISPATCH EXPENSES	427,186	247,665	-	469,473	1,144,324
FIRE/EMS EXPENSES	1,782,564	2,313,783	162,260	1,769,232	6,027,839
REVENUES:	1,148,654	1,600,075	129,460	1,479,162	4,357,351
EXPENSES:	4,295,423	3,341,448	944,676	4,475,758	13,057,305
NET COST:	3,146,769	1,741,373	815,216	2,996,596	8,699,954

From the Committee and Matrix Consulting Group

Estimates of percentage of total costs for various possible measures that might be useful in generating a cost-sharing formula by the Committee or its consultant.

Current Percentage Data		Barre City	Barre Town	Berlin	Montpelier	Totals
Committee Net Cost per Town (2010?)		36%	20%	9%	34%	100%
Committee	Fire Calls	34%	11%	13%	42%	100%
Committee	EMS	53%	11%	4%	31%	100%
Committee	Police Calls	43%	14%	11%	32%	100%
Committee	Population	32%	29%	10%	28%	100%
Committee	Road Miles	17%	38%	25%	20%	100%
Matrix	Equal Shares per Town	25%	25%	25%	25%	100%
Matrix	Crime Rate	20%	24%	6%	50%	100%
Matrix	Average Home Sales Price (2006)	19%	25%	25%	31%	100%
Matrix	Property Tax Rate	30%	21%	21%	27%	100%
Matrix	# of Calls (PD & Fire w/o Berlin)	32%	10%	10%	48%	100%
Matrix	State Equalized Value (2011)	21%	29%	17%	34%	100%

Individual rows or columns may not total due to rounding.

Appendix B

STATUS REPORT #2 FOR THE PUBLIC SAFETY AUTHORITY PROJECT Central Vermont Public Safety Committee

This status report intends to respond to the questions and concerns presented in the Public Safety Committee and Central Vermont Chamber of Commerce's response to the Matrix Consulting Group's August Draft Report regarding cost allocation alternatives.

The primary concern that was expressed in the report related to the Calls for Service variable. The Committee and the Central Vermont Chamber of Commerce expressed concerns regarding the definition of the "Calls for Service" variable, the source of the data, and the timeframe of the data included in the report. Additionally, there was also a desire to determine if there was a single source at the state level that could be used to obtain the data.

The following points are in direct response to the questions asked on pg. 5 of the Public Safety Committee and Central Vermont Chamber of Commerce's response to the August Draft Report:

- **_What constitutes a "call for service" in the August 22 draft?**

A "call for service" is a commonly used metric for police, fire, and EMS departments to measure the need or scope for service in a given area. It counts the number of calls the departments receive directly related to the department providing service, e.g. if an accident happens and someone calls 911 to help, that is a call for service. In police, it should exclude officer initiated activity which varies tremendously among departments in terms of what is counted and is more policy and service related than unambiguous 'calls for service'.

- **_What types of calls are included; what are excluded?**

Each of the Police and Fire Chiefs were asked to provide data for Calls for Service. As such, most individuals strictly provided a number, without going into detail regarding which calls were excluded and which were included in that statistic. The project team was not in a position to audit the consistency of definition of calls among the agencies nor the accuracy of their reports of workload.

Exception: The Barre Town Fire Department only provided the number of emergency responses.

- **_What is the source of the data?**

The source of the data is directly from the Fire and Police Chiefs of each of the four towns and cities that are part of the Regional Public Safety Authority. The project team could not audit these reports of workload to determine consistency among the agencies.

Exception: The Berlin Volunteer Fire Department did not provide any data; as such the total number of Calls for Service for Berlin only included the Police Department's Calls for Service, which was noted in the draft report.

- **_What timeframe does the data cover?**

Each of the Fire and Police Chiefs were asked to provide data that was reflective of a year period. Data for the most recent year was requested.

- **_Is the data available for a number of years?**

Data was only collected for the timeframe of one year. The availability of the data would directly depend on the data available to the Police and Fire Chiefs.

- **_Is there a degree of consistency in the data year over year?**

Based on the calls for service data provided in the response rate compared to the calls for service data received by the project team, there is not a high degree of consistency. As a result, it might be better to use an average of the calls for service data to maintain a degree of consistency and to better represent the need and scope for service in the area. And, again, in the absence of our ability to audit the agency definitions of 'calls' as well as the accuracy, the possibility of inconsistency is there.

- **_Is the data available by municipality from a statewide source?**

While the Fire Marshal website might be a potential source for fire data, there is not a statewide source for Police service for calls data.

In summary, "Calls for Service" is one of the most commonly used statistics by Police and Fire Departments to measure the scope of service and utilization of public safety personnel in a community. The project team obtained data for one calendar year directly from the Police and Fire Chiefs of each of the four communities participating in the regional consolidation effort.

However, considering the concern regarding the accuracy of the "calls for service" variable, there should be a review of each of the community's definition of response workload as well as the accuracy of these counts.

I hope that this status report addresses the concerns and questions regarding the "Calls for Service" variable represented in the response to the August Phase 1 Report. With these responses we view that our scope of work for Phase 1 is complete. Regarding Phase 2 I believe that we would need to discuss in more detail the scope and nature of the work we would perform with you and the Regional Committee. We look forward to continuing to work with you on this important question for the communities participating in this effort.

Matrix Consulting Group

Richard Brady, President

APPENDIX C

Public Safety Authority Action Plan Targets

Adopted 8/9/12

2012	August	Draft & Discuss Action Plan
	August	Adopt an Action Plan
	Sept	Draft & Discuss Formula Option(s)
	Sept	Adopt Finance Formula
	Oct	Discuss deployment concept plans
	Oct	Draft Progress Report (Formula & Action Plan)
	Nov	Finalize Progress Report
	Nov	Formula & Action Plan to Boards
	Dec	Committee Draft Deployment
2013		(Employee based model)
	Jan	Committee Presentation & Critique
	Jan	PSA Draft Deployment Option & Hire PS consult
		Hire PR Person & Design Chiefs meetings
	Feb	Fire & EMS Chiefs
	Feb	Police & Dispatch
	Mar	Outside professionals revise option(s)
	Mar	Adopt PSA Deployment Option(s)
	Apr	Finalize budget for remaining funds
	Apr	Deployment Option to Public Officials
	May	Hire Legal & Financial Expertise
	May	Service Club & Organization Presentations
	Jun	Service Club & Organization Presentations
	Jun	Service Club & Organization Presentations
	July	Adopt Authority Wording & Financial Estimates
	July	PACKAGE presentation to Public Officials
	Aug	Four Boards final Approval: Identical language
	Aug	PR Campaign
	Sept	PR Campaign
	Sept	Public Hearing
	Oct	Four town vote.
2013	November	final date for reconsideration
2014	Spring	charter to legislature
	Subsequent	elections and implementation of Authority

For previous reports:

Committee Report #1 presented March 18, 2010 at www.central-vt.com/psareport1.pdf

Committee Report #2 presented November 3, 2011 at www.central-vt.com/psareport2.pdf