



Upper Valley Lake Sunapee
Regional Planning Commission

13 September 2011

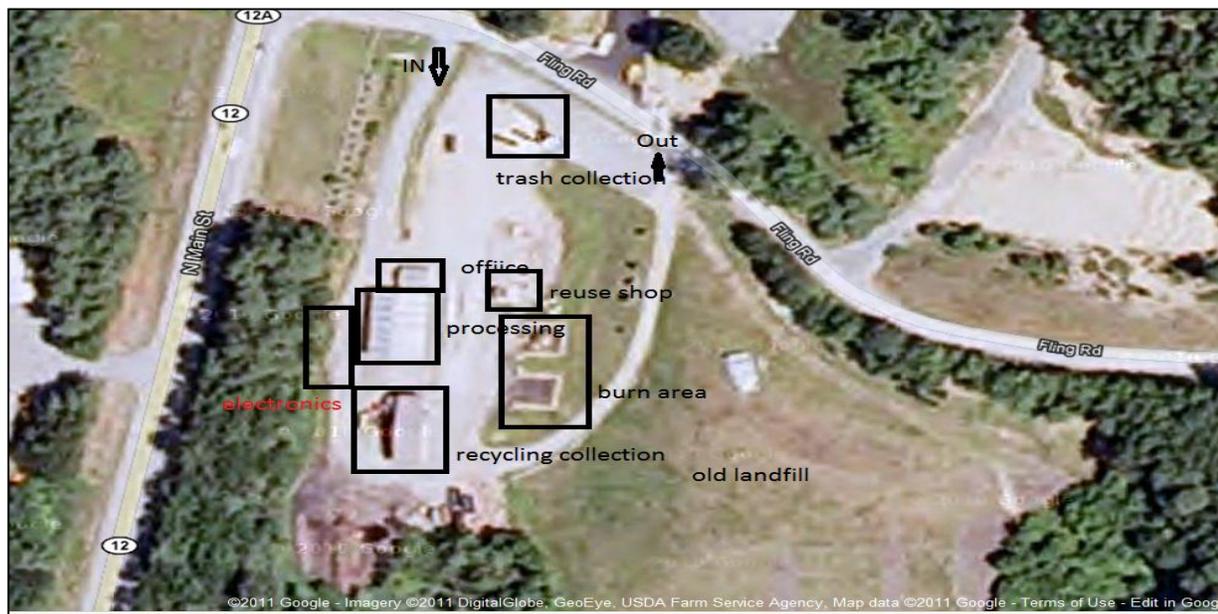
Keith Weed, Superintendent
Highway Department and Recycling/Transfer Station
PO Box 385
Charlestown, NH 03603

Via Email: ctownhwy@sover.net

Dear ~~Mr. Weed~~ Keith:

It was a sincere pleasure to meet with you, your staff and other town officials at the Charlestown Waste Reduction Facility. I thoroughly enjoyed the tour and discussions we had about current operations at the facility and some changes you would like to incorporate in the future.

The layout of the entire waste facility is arranged to encourage waste reduction through recycling, composting of leaf and yard waste, and the reuse of clothing, books and other items. I like the fact that you have a special collection area for individuals who have physical disabilities making it easier for them to recycle. I also admire Charlestown's independent spirit by tackling the costly issue of hauling, by using your own trucks to haul recycling and other materials—thus cutting out the middleman.



The Current Waste Reduction Program

The estimated 2009 population of Charlestown is 5,298. In 2009, the budget for solid waste operations was \$319,057. The operating budget is appropriated through property taxes. Revenue from fees, recycling and resident waste stickers (\$25/annum) was 133,289. This revenue goes into the general fund. In 2009, The

town disposed of 2,280 tons of MSW and C&D at the NCES landfill in Bethlehem, NH and recycled 537 tons through various markets including the City of Keene and the Northeast Resource Recovery Association.

Signage and Current Waste Reduction Efforts

Signs are used effectively throughout the facility. They guide the user to enter through one gate and exit through another. On the way, signs encourage and direct residents to various recycling, composting, and

waste reduction opportunities (including reuse, electronics, lead acid battery, and tire recycling stations) before they get to rubbish disposal .

Charlestown has an unofficial ban on the disposal of scrap metal, glass, recyclable materials, electronics, brush, yard waste and

construction and demolition (C&D) debris with the rubbish.

All C&D must cross the scale and is charged a fee of \$.065 per pound or \$130 per ton. C&D is hauled to Bethlehem, NH. Bulky wastes (furniture, mattresses, etc.) and C&D debris are collected in the same roll-off container. There are fees for the handling of furniture, electronics, propane tanks, appliances with and without Freon, tires and fluorescent bulbs. Used motor oil is collected and used to heat the baling/storage building.

Signs guide residents to the various recycling areas: tires, batteries, cardboard (OCC), compast, mixed paper (everything except OCC), electronics, aluminum cans, mixed glass, mixed plastics/tin/ aluminum.

Leaf and yard waste is accepted at no fee. This material is composted and used by the town for community projects or sold to the public for \$10 per cubic yard.

Stairs lead to a ramp providing access to the glass, paper and mixed container roll-offs. A small recycling cart is provided for people who may have difficulties with stairs. For quality control reasons, ceramics, pottery and other glass are collected at no charge in a separate container.

Residents are encouraged to leave reusable clothing and books at the Reuse Hut. These materials are available at no cost to residents.



The mixed paper and mixed containers are taken to Keene for processing and sold through the NRRA. Keene charges \$14.50/ton as a processing fee with no revenue from the sale of the product. Keene also takes their mixed glass aggregate to use for highway and public works projects. A small fee is paid to the NRRA and the City of Keene for the crushing and screening of the aggregate. Charlestown uses a down-stroke horizontal baler to bale OCC and UBC.



A roll-off adjacent to the scales is used for the collection of scrap metal (excluding propane and other tanks). These commodities are marketed through the NRRA.

Charlestown burns clean wood and brush in an open burn area. The loads are monitored for prohibited items before they can be unloaded. In general, the debris pile is burned twice per week. The ash is mixed with the rubbish and sent to the landfill for disposal.

All residents must have an annual town sticker which allows them access to the facility. Only vehicles displaying the sticker are allowed access to the facility. The final stop through the facility is a trash compactor. The town accepts waste from residents and businesses at no charge. These materials are compacted and hauled to the Bethlehem landfill. The trash is dropped into an open hopper and compacted into roll-off containers for transport by the town. An attendant monitors the waste as it is dropped into the hopper and watches for prohibited items as indicated by signs. The compactor is 15 years old and under a maintenance agreement for emergency repairs and regular maintenance.



Changes Desired by the Town

In my discussion with the staff, they suggested the following changes they would like to see:

- Install a horizontal baler. This would increase their bale sizes and productivity. The cost of the baler would have to be raised through taxes and approved by voters.
- With a horizontal baler they could sell more materials for additional revenues. They would like to remove aluminum and tin from the comingled container. Both of these commodities have strong revenue histories. If this is done, the City of Keene will no longer accept the remaining materials. However:
- With a new baler, they could bale source separated plastics for market. The current program allows for comingled 1-7 plastics. Most markets for source separated plastics will only accept numbers 1 and 2. A public education program would be needed to explain the new program as well as new containers for the extra sorting. Additional staff time would be required to assist with monitoring and handling materials.
- The trash compactor is 15 years old and will soon require replacement. This cost will have to be raised through taxes and approved by the voters.
- Install a sign on the back of the trash compactor that displays tonnage averted from the landfill and disposal costs save, recycling tons, and compost tons. There is a large space on the backside of the compactor facing the waste reduction area where the sign could be placed. This is a great idea to visibly demonstrate savings generated through the efforts of waste reduction. It could also remind residents to recycle more.

Recommendations

As part of a grant the Upper Valley Lake Sunapee Regional Planning Committee received from USDA, a review of community solid waste programs was included. Charlestown requested an examination of their program/facility and recommendations to improve its efficiency, layout and/or operations.

Charlestown is doing a great job at reducing their wastes. These efforts should be commended. The revenue generated from the waste reduction efforts described help defray the costs to taxpayers. However, any funds needed for operating costs and capital expenditures must be approved by the residents at their annual budget meetings. In these difficult financial times, any steps to save residents money will make the process easier.

The following are suggestions which may help reduce the cost to residents, and increase waste reduction in Charlestown:

- The layout of the facility works well with the current space and terrain. There are no suggestions to improve the layout.
- Burning of clean wood and yard waste generates pollution and may disturb neighbors nearby. The State of NH is considering a ban on this practice. A better use of this material is to shred it. Tub grinders can be hired and the materials can be used and/or sold as mulch. The cost to grind is approximately \$400 to \$600/hour plus transportation (the transportation costs can vary depending upon vendor and the point of origin). See attachment A for a list of potential vendors.
- Your signage works well. However, you should update your signs regularly. If your signs get bent or illegible, you should replace them. NH the Beautiful has a grant program available for free signs. For more information, please contact the NRRRA for information.
- It would benefit both the facility and town to have a comprehensive capital improvement plan (CIP) for the facility. The CIP helps anticipate future funding by prorating the cost of each piece of equipment over its projected life. The monies annually allocated for the Capital Equipment fund are approved annually as part of the town budget. This strategy eliminates the sticker shock when a piece of equipment needs replacement.
- Charlestown is recycling around 25% of their waste stream according to the 2010 annual report filed with the Waste Management Division of NHDES. This figure is very commendable. However, a Pay-as-You-Throw Program (PAYT) would benefit the community by:
 - Encouraging waste reduction and discouraging trash disposal.
 - Reducing waste brought in from other communities. Staff believes that some waste comes in from surrounding communities. Residents of Charlestown may accept waste from out of town family and friends. PAYT discourages this practice.
 - PAYT encourages resident to utilize the free waste reduction options rather than paying for trash disposal. There are a variety of programs which can be adapted by the town. Most programs charge a per bag fee for individuals depositing their waste.
 - PAYT equalizes the cost of disposal and eliminates inequities found in tax based systems. In a tax based program, the cost of the solid waste program is part of the entire tax load and charged to all based on property values, not the volume of waste disposed. This results in households generating little trash subsidizing those who generate more.

- It would be an easy switch for the staff to use the scales and computer program already in place to collect and track funds for trash brought to the facility. Small collectors may bring waste but pay a fee determined by your scale.
- Most towns have switched to a PAYT system without an increase in illegal disposal or major complaints from the populace. A concerted effort to educate the residents is needed to make any switch successful. A few years ago, the Town of Walpole introduced a PAYT program which has worked successfully to reduce their disposal costs and increase waste diversion. The Upper Valley Lake Sunapee Regional Planning Commission or the Northeast Resource Recovery can provide guidance and recommendations on the implementation and operation of a PAYT Program.

Once again I would like to thank you for the time you and the staff took to show me your program and the efforts you make to reduce waste disposal. As mentioned earlier, I think the facility and your waste reduction efforts are commendable. Please contact me with any questions you may have about the suggestions made.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Pinkson-Burke', written in a cursive style.

Patrick Pinkson-Burke
Solid Waste Planner
Upper Valley Lake Sunapee Regional Planning Commission



"Partnering to make recycling strong through economic and environmentally sound solutions"

Northeast Resource Recovery Association, 2101 Dover Road, Epsom, NH 03234
Telephone: (603) 736-4401 Fax: (603) 736-4402
E-mail: info@nrna.net Web Site: www.nrra.net

Brush/Stump Processors

1. Aggregate Recycling Corporation (ARC)
Eliot, ME 03903
Contact: Jay Doherty
Phone: 1-207-439-5584
www.aggregaterecycling.com
Materials ARC processes include: stumps, pallets, construction/demolition wood waste, asphalt shingles and concrete, as well as premium bark mulch.
2. Commercial Recycling Systems
Scarborough, ME 04074
Contact: Tom Kane
Phone: 1-207-883-3325
www.cprcs.com
CPRC Systems provides a wide range of soil remediation and construction/demolition debris recycling services.
3. M-R Wood Recycling
Derry, NH 03038
Contact: Dan Roy
Phone: 1-603-425-0300
www.m-rwoodrecycling.com
M-R grinds material on-site or removes material from site.
4. Pro Bark, Inc.
Plaistow, NH 03865
Contact: Jeff Brown
Phone: 1-603-382-6860
www.probark.com
Services include wholesale and retail mulch sales, wood and greenwaste recycling, bark blowing, and mulch application

Please tell these companies that you received their name from NRRA.