DATE/TIME: May 27, 2008 5:00 PM LOCATION: Whitney Hall Conference Room, 23 Main Street, Enfield NH

I. CALL TO ORDER: The meeting was called to order at 5:02 P.M.

ATTENDANCE: Present: Charles DePuy, Carol Lammert, Richard Lammert, Steve Goldsmith, Meredith Smith, Wendell Smith (alternate). Special Guest: Ken Daniels, Enfield Public Works Director Absent: John Burritt (alternate). Administrative Staff: Alisa Bonnette.

II. APPROVAL OF MINUTES: Minutes of the April 22, 2008 meeting were accepted as amended on the Internet.

III. SPECIAL GUEST

Mr. Ken Daniels, Director of Enfield Department of Public Works (DPW), responded to questions from the committee related to three areas; recycling, waste disposal and public works energy issues.

The relationship of energy concerns with waste collection was explained as somewhat interrelated. Examples given were the energy used to make new paper versus recycling, the methane produced by breakdown of trash, and the cost of fuel in trash collection/hauling.

The village currently uses curbside pick up and transfer station services for removal of solid waste. There is much recyclable material at curbside that could be recycled (example: cardboard).

The annual cost for tipping fees to Lebanon for solid waste management is about \$150,000. About \$40,000 is recouped from recycling. There is an additional fee of \$15,000 for hauling. We do not make money on paper recycling though some money is recouped and offsets our tipping fees. Cassella Systems may return \$400 - 2000 per month for all recycled aluminum plastic , paper, etc. The market value for paper, plastics and metals does fluctuate daily. Fees are charged to residents for disposal of tires and refrigerators. There is no charge for Compact Florescent Light (CFL) bulbs, which state law requires be recycled because of the mercury content. Builders waste is not accepted at the transfer station. The current percent of food waste collected is estimated to be 20%. Composting bins are currently available for purchase at the transfer station to encourage the practice.

Regarding waste disposal, the majority of the waste collected (paper, plastic, steel) goes to Casella Waste Management. Metals are sent to Harding Metals in Northwood. Electronics (ranging from computers to refrigerators) are sent to East Coast Recycling. The remainder is taken to Lebanon.

Various solid waste management systems were discussed.

When the current contract expires in one year "pay as you throw" is a method that is being considered. One benefit of this method is that it has built in incentive for increased recycling and possibly composting. Curbside pick up could occur biweekly with collection of trash alternating with recyclables. As well, there may be an option of weekly pick up using collection units that are compartmentalized for both trash and recyclables. At this time pay as you throw 30 gallon

bags which cost \$3.00 each are available at the dump for non residents. If this system is to be implemented, labeled "pay as you throw" bags would be made widely available at town hall, transfer station, as well as retail and supermarket locations in the region.

It was noted that the benefit of curbside collection over individual trips to the transfer station offers conservation of fuel usage. The alternative of satellite transfer stations would require an increase in manpower (at a cost of \$60,000 - 70,000 for a solid waste employee) because of the need to monitor disposal regarding public safety concerns. There are risks from inappropriate items being placed in bins (an example is spent propane cylinders). It is estimated, per self reporting by solid waste management personnel, that currently 17% of collected waste is being recycled. An attainable goal could be established as 30% - 35 %. However, if 40% were attained there would be a \$5.00 per ton reduction in a tipping fee. The pay as you throw system could provide a tax savings of \$0.80 per \$1,000 assessed property value. There is a definite financial advantage to recycling. Promoting the financial benefit might serve as an incentive.

Single stream recycling is used by some areas in Vermont. There is a system in use in Rutland. Material recovery may be either manned or automated MRF to sort substances of value. Tipping fees/reimbursement for recyclables are set according to truck weight. There is a need for manpower to reclaim button cell batteries and florescent bulbs (containing mercury). This is an issue for the Enfield transfer station, as well. The committee discussed the benefits and drawbacks of this process. It was questioned if single stream recycling affects the carbon foot print. Energy may be harnessed with use of an incinerator which burns food waste and other non recyclable materials.

Information on energy use by various public works entities was discussed. Various buildings and their energy use/CO2 emissions were reviewed (Enfield Center Fire, Depot Street, Community Building, Police Department, Union Street, Whitney Hall). The DPW building is heated with oil, waste oil and propane.

| Gallons | Location | \$ | LB Co2 | Tons Co2 |
|---------|-------------------|--------------|-----------|----------|
| 1170.9 | Center Fire | \$2,615.88 | 26,209.43 | 13.10 |
| 878.2 | Community Bldg | . \$1,988.74 | 19,657.63 | 9.83 |
| 1125.2 | Depot Street | \$2,479.43 | 25,186.48 | 12.59 |
| 2303.2 | DPW | \$5,429.36 | 51,554.83 | 25.78 |
| 829.6 | PD | \$1,837.79 | 18,569.77 | 9.28 |
| 1196.17 | Shedd Street | \$2,470.13 | 26,775.07 | 13.39 |
| 1497.8 | Union St. Station | \$3,316.33 | 33,526.76 | 16.76 |
| 2825.3 | Whitney Hall | \$6,479.90 | 63,241.52 | 31.62 |
| | | | | |

Calendar year 2007 OIL usage/impact summary:

Totals 11826.37 gallons

\$26,617.55

264,721 lb. Co2 132.36 tons Co2

Calendar year 2007 PROPANE usage/impact summary:

| Transfer Station: | 123.30 gallons, | \$ 206.62 | 1,602.90 lb Co2 | 0.80 tons Co2 |
|-------------------|-----------------|-------------|-----------------|---------------|
| Community Bldg. | 723.70 gallons, | \$ 1,684.67 | 9,408.10 lb Co2 | 4.70 tons Co2 |
| DPW | 609.90 gallons, | \$1,208.03. | 7,928.70 lb Co2 | 3.96 tons Co2 |
| | | | | |

Totals

3,028.90 gallons, \$6,733.91 39.375.70 lb Co2 19.69 tons Co2

Regarding vehicular fuel usage by the public works department, use of biodiesel fuel was problematic because of algae growth within the fuel tanks. It was labor intensive with frequent fuel filter changes and cleansing the fuel systems. Currently ethanol/diesel blend of 25/75 or 20/80is being used. All but one of the Public Works vehicles are diesel fueled. The diesel motors are efficient. Data is needed on the history of vehicular fuel consumption. It was noted that weather conditions, particularly over the past 6 months, would present a great variable.

Use of electricity was reviewed. National Grid maintains street lights. Enfield has 227 streetlights (location of them all needs to be identified). About 8,563 Kilowatt Hours, \$2,044.50 per month (102,756Kwh, \$24,534/year) The process by which a new street light is placed involves a request to Ken and Dickie, the Police Chief, who use their judgment as to the validity and feasibility of the request. Typically, The area will be lit if it involves vehicular traffic and pedestrians. However, some street lights are just placed. It is estimated that possibly 10 % of the streetlights could probably be removed with no negative impact. There are 147 50 watt streetlights, 18 100 watt, 2 250 watt, 47 100 watt, 11 175 watt and two 400 watt streetlights. While the use of LED bulbs would save tremendous amounts of wattage/energy the cost is prohibitive. The business area of town has ornamental lights that are for pedestrian traffic and are incandescent bulbs. Data from National Grid on street lights was presented though location of the lights is lacking. Rich will find locations of street lights.

Committee members expressed their deep respect for our veterans and those who honor then with the Veteran's Memorial Park (VMP). However the energy consumption at this location warrants further discussion and investigation. Lighting at the VMP was noted as expensive with the use of several high intensity lights. It was mentioned that the flag poll in front of the laundry is solar powered by a light that cost about \$70.00. If was asked if these could these be used elsewhere. It was noted that lighting of flags does not require a set brightness. It was unknown if the need for lighting a flag is still required (It was thought to be withheld for security reasons after 9/11).

The DPW is changing to energy efficient light bulbs. Motion sensor switches for offices are being added. Set back thermometers for offices/ building were advocated. It was thought that the heat control for the library was automated. It was agreed that there is a need for posted instructions for power use for public buildings. An example is the proper settings/switches for the Community Building kitchen equipment, lighting, heating, etc. Ken may be a resource for writing the instructions.

Specific written questions were addressed. Regarding the Whitney Hall furnace there is not a service contract for it. There was a multi-municipality contract for fuel bids and when that is disolving, and going forward, each town will have to negotiate pricing individually. Wendell asked if geothermal heating was a possible alternative for heating Whitney Hall. It is being used/considered in some areas in the Northeast. He suggested that a company be contacted to

offer a bid. It is known that the initial cost is high though thereafter the cost is minimal.

IV. OLD BUSINESS:

Review of town energy consumption data: Charles DePuy presented fuel usage. He noted that the DPW facility is most efficient. Other service buildings were discussed. Reasons were shared on why some may need to be heated (Examples: engines may need to be kept warm so that they will start in winter, consumable supplies on the ambulance need to be held at certain temperatures, etc.). Charlie will provide his data via the Internet. Committee members were encouraged to review the oil and propane data tabulated by Steve independently (also available on the Internet).

EPA Community Energy Challenge of 10% energy reduction: A target needs to be established. Steve will look into use of the EPA software (ENERGYSTAR Portfolio Manager) and this will be discussed at the next meeting. Wendell mentioned use of Homer energy software which is a government program for energy use in the home. A conference is available at the Vermont Law School later this week.

Reports from attendees at local meetings/events: In light of the suggested meeting limit of not greater than two hours it was suggested that members offer their reports to fellow committee members via the Internet. Charlie mentioned that use of the EPA Energy Challenge was promoted by participants at the Sustainable Energy Resource Group (SERG) meeting, Efficiency Makes \$ense.

Goals and Objectives: Charlie questioned if we need to expand on a mission statement and set specific goals. The Internet priority list of interests has been reviewed by some committee members

Communications tools (Google/Yahoo sites for ongoing communication of data, minutes, etc.): There is a learning curve and Steve will assist committee members. However, the need to be independent in use of these tools was advocated.

Other: In light of time no additional information was discussed.

V. NEW BUSINESS:

Visibility/public education opportunities:

Booth at the Enfield Farmers Market: Meredith will present information to the public at the market in early September. Materials from SERG may be useful. Steve will assist with finding materials.

Library Kit: A Kilowatt meter would be an appropriate addition to an energy package.

EVA Home and Garden tour: Alternative Energy Fair in August of 2009: Meredith and Carol will work toward offering a Alternative Energy Home Tour modeled on the 5/17/2008 Lyme, New Hampshire presentation. A pilot project in connection with EVA's Art and Garden tour in mid July of '08 was not considered due to uncertainty of meshing with its theme and because of time constraints. Individual Committee members have knowledge of Enfield citizens who are currently using alternative energy sources. Area companies may be contacted for additional information. A suggestion was given to contact Carola Lea in Lyme who is an Energy Committee member there who helped with organizing their town Fair and Tour.

VI. OTHER ITEMS:

Wendell considered the possible use of hydro power at the Mascoma River/Lake. He also shared information on an Eco. Town which is carbon neutral in Germany. Others mentioned that the Shakers were early inventors and that water power was used and there are remnants of hydro

power systems in the Mascoma River. He mentioned that Thayer may be interested in studying alternative energy resources as possibilities for the area. Enfield could be a leader in energy efficiency.

Time management for meetings: It was suggested that time allotments be added to the meeting agenda. There was discussion on the frequency and length of meetings. The majority felt extending beyond 2 hours while meeting once a month was preferred.

The next meeting will be June 25 at 5:00 P.M. at Whitney Hall in the Conference Room.

VII. ADJOURNMENT: The meeting was adjourned at 7:35 P.M.

Respectfully submitted, C. Lammert 6/25/2008 9:30 AM