



THE TORONTO AND REGION CONSERVATION AUTHORITY

**Sustainable Communities Board Meeting #5/04**

<b>Chair:</b>	<b>Michael Di Biase</b>
<b>Vice Chair:</b>	<b>Suzan Hall</b>
<b>Members:</b>	<b>Maria Augimeri</b>
	<b>Glenn De Baeremaeker</b>
	<b>David Gurin</b>
	<b>Colleen Jordan</b>
	<b>Glenn Mason</b>
	<b>Elaine Moore</b>
	<b>Gerri Lynn O'Connor</b>
	<b>Linda Pabst</b>
	<b>Andrew Schulz</b>
	<b>John Sprovieri</b>
	<b>Dick O'Brien - Chair, Authority</b>

**October 1, 2004  
11:00 A.M.**

**SOUTH THEATRE, BLACK CREEK PIONEER VILLAGE**

---

**AGENDA**

---

- |            |  | <u>Pages</u> |
|------------|--|--------------|
| <b>1.</b>  | <b>MINUTES OF MEETING #4/04</b><br>(Enclosed herewith on Green)  |              |
| <b>2.</b>  | <b>BUSINESS ARISING FROM THE MINUTES</b>   |              |
| <b>3.</b>  | <b>DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF</b>   |              |
| <b>4.</b>  | <b>DELEGATIONS</b>   |              |
| <b>5.</b>  | <b>PRESENTATIONS</b>   |              |
| <b>5.1</b> | A presentation by Christopher Chiaravallotti, Director, Fleet Services Division, City of Toronto, in regards to item 7.1 - Sustainable Corporate Fleet Policy. |              |
| <b>5.2</b> | A presentation by Geoff Cape, Executive Director, Evergreen Environmental Foundation, in regards to item 7.2 - Don Valley Brick Works.                         |              |

**5.3** A presentation by a representative from Enbridge Gas Distribution Inc. in regards to energy sources for the future.

**6. CORRESPONDENCE**

**7. SECTION I - ITEMS FOR AUTHORITY ACTION**

**7.1 SUSTAINABLE CORPORATE FLEET POLICY** 3-5

**7.2 DON VALLEY BRICK WORKS**  
Memorandum of Understanding with the Evergreen Environmental Foundation. 6-9

**7.3 USE OF BIODIESEL FUEL** 10-11

**7.4 THE LIVING CITY CENTRE**  
Update of programs  
*Report to Follow*

**8. NEW BUSINESS**

NEXT MEETING OF THE SUSTAINABLE COMMUNITIES BOARD #6/04,  
TO BE HELD ON DECEMBER 3, 2004, IN THE HUMBER ROOM, HEAD OFFICE

Brian E. Denney  
Chief Administrative Officer

/af

**TO:** Chair and Members of the Sustainable Communities Board  
Meeting #5/04, October 1, 2004

**FROM:** James W. Dillane, Director, Finance and Business Development

**RE: SUSTAINABLE CORPORATE FLEET POLICY**

---

**KEY ISSUE**

Provides background information on Toronto and Region Conservation Authority's fleet management and guiding principles to make the fleet as "environmentally sustainable" as possible.

**RECOMMENDATION**

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT the Sustainable Corporate Fleet Policy be that the Toronto and Region Conservation Authority (TRCA) will own, rent and/or lease, to the extent that it is practical to do so, vehicles and equipment using the best available, proven, environmental technology, the most sustainable fuels and practice the most sustainable maintenance procedures;**

**THAT the TRCA adhere to the principles outlined in the staff report dated September 21, 2004 in administering this policy;**

**AND FURTHER THAT staff report to the Sustainable Communities Board at its meeting to be held in February, 2004 progress toward achieving more environmentally sustainable vehicle and equipment usage.**

**BACKGROUND**

As staff continue to implement the objectives of The Living City vision, all TRCA operations are being reviewed and monitored in terms of sustainable management practices. TRCA's fleet of vehicles and equipment is not large by municipal standards but does represent an important opportunity to demonstrate TRCA's commitment to the very best environmental practices.

TRCA staff research and regularly monitor successful fleet management activities in other jurisdictions, both in the private and the public sector. For example, the City of Toronto's green fleet policy and practices have been very useful.

**RATIONALE**

The TRCA owns 45 vehicles. The units include a 5 ton transport truck, 3/4 ton stake trucks, pickup trucks, passenger and utility vans, and cars. The TRCA owns two Hybrid Honda Civic cars and two Dodge Dakota Quad Cabs which burn both natural gas and gasoline. The types of vehicles reflect the variety of tasks the TRCA undertakes on a daily basis. Each vehicle is assigned a supervisor who is responsible for the maintenance and care of the vehicle. Also, TRCA rents approximately 45 vehicles each year during the summer operating season. These vehicles are compact cars, mini vans and pickup trucks. These vehicles are used to transport seasonal staff for watershed monitoring programs and conservation areas operations. A majority of the vehicles are rented for approximately 4-6 months.

The funding for the operation of the TRCA owned vehicles is budgeted from the Vehicle and Equipment Reserve. Each vehicle is assigned a kilometre rate which over the life cycle of that vehicle pays for the fuel, maintenance and a replacement vehicle at the end of its lifecycle. The kilometre rate is based on the type of vehicle, the fuel economy rating and the amount the vehicle is driven each year. The kilometre rate for each vehicle is reviewed each year to take into account any adjustment in the fuel costs and inflation rate for the replacement vehicle. The TRCA replaces its vehicles between 5-8 years or 100,000 kilometers. The average lifecycle of an TRCA vehicle is 5 years. When purchasing a new TRCA vehicle staff follow the purchasing and disposal policies and sustainable management policies. Vehicles are disposed of through auction centres.

TRCA utilizes the services of ARI, a fleet management company selected by competitive bids, to record the fueling and maintenance of the vehicles. ARI supplies the TRCA with data which include kilometres driven by each vehicle, fuel usage and maintenance carried out on each vehicle. Each vehicle is assigned a card which is used for payment for fuel and maintenance. Each transaction is recorded and billed to the TRCA on a monthly basis. The purchasing of fuel and all maintenance or mechanical repair is carried out at an ARI approved supplier. Prior to any major repairs being carried out on a TRCA vehicle, the supplier must call into the ARI call centre and receive authorization from a licensed automotive technician. Each major repair is scrutinized by an ARI technician to ensure that the work is necessary and best value is achieved. The ARI technician investigates possible warranty coverage for the repair from the initial supplier or the repair facility. As a result of using the ARI fuel and maintenance card, TRCA receives discounts from the major fuel supplier and some approved repair facilities. The cost of the using an ARI card is \$4.50/month per vehicle. The TRCA follows the maintenance schedule for each specific vehicle to ensure the warranty requirements are met. This information is utilized on an ongoing basis to measure and analyze the performance of the fleet.

In 2003, 42 vehicles (excluding rentals) travelled 653,000 kilometres. These vehicles used about 113,000 litres of gasoline and diesel fuel. The average fuel consumption is 17.3 litres per 100 kilometres travelled. This is an unacceptably high rate of consumption but it reflects the fact that the fleet is so varied. It is important to look at individual vehicles as well as overall performance since we have hybrids at less than 6 litres per 100 kilometres and heavy trucks doing snow ploughing at 25 litres per 100 kilometres and higher. At the end of 2004, information will be assembled and compared with 2003 performance to determine how much improvement TRCA has achieved in terms of efficiency and sustainability. Staff will report to the Sustainable Communities Board at its February meeting on this performance.

### **Sustainable Corporate Fleet Policy**

The Living City vision recognizes the need for TRCA in all its operations to reflect the very best sustainability practices. Vehicles and equipment are one facet of TRCA operations which, when managed sustainably, can make a positive contribution to improving the health of the Toronto region. As a result, the staff recommended Sustainable Corporate Fleet Policy is that:

*TRCA will own, rent and/or lease, to the extent that it is practical to do so, vehicles and equipment using the best available, proven, environmental technology, the most sustainable fuels and practice the most sustainable maintenance procedures.*

The objectives of this policy are to:

- facilitate progress toward The Living City vision and Sustainable Communities objective;
- meet the standards of TRCA environmental policies and sustainability management system targets; and
- meet the most efficient operational requirements.

"Equipment" includes tractors, loaders, etc.

The following are the principles of TRCA's sustainable corporate fleet:

- within each class of automobile required by TRCA, ensure all automobiles acquired are powered by hybrid technology or better, as available;
- ensure all vehicles purchased for transportation of people (only) are automobiles; SUV's, minivans, pickups or other types of vehicles will only be acquired if such vehicle has demonstrated performance that is more sustainable than the preferred vehicle class;
- during the procurement of all vehicles, including leases, ensure that fuel efficiency and emissions ratings will be considered as criteria equally important as cost, safety and other vehicle requirements;
- support the practice of utilizing sustainable modes of transportation for staff at all TRCA locations (e.g. bicycles, electric carts, etc.);
- ensure efficient, sustainable fleet management, collecting all information relevant to fleet performance, enabling proper maintenance of vehicles to be measured and enforced;
- implement, promote and monitor a "non-idling for more than one minute" policy for all TRCA vehicles;
- continue to investigate alternative fuels and implement the use of such fuels wherever feasible;
- implement biodiesel use in equipment and vehicles;
- where possible, implement low sulphur diesel use as per recommendations of the Clean Air Council;
- continually research new fleet sustainability technologies;
- for gasoline or other fuel purchases, preference will be given to companies listed on the Dow Jones Sustainability Index;
- where possible, 4 stroke equipment or high efficient 2 stroke motors shall be preferred to regular 2 stroke.

**Report prepared by: Jim Tucker, extension 5247**

**For Information contact: Jim Tucker, extension 5247; Brian Dundas, extension 5262**

**Date: September 21, 2004**

**TO:** Chair and Members of the Sustainable Communities Board  
Meeting #5/04, October 1, 2004

**FROM:** James W. Dillane, Director, Finance and Business Development

**RE: DON VALLEY BRICK WORKS**  
Memorandum of Understanding with the Evergreen Environmental Foundation.

---

**KEY ISSUE**

Seeks approval for the Toronto and Region Conservation Authority to enter into a Memorandum of Understanding with the Evergreen Environmental Foundation and the City of Toronto to enable the adaptive re-use of the heritage and cultural resources of the Toronto Don Valley Brick Works.

**RECOMMENDATION**

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT the Toronto and Region Conservation Authority (TRCA) enter into a Memorandum of Understanding (MOU) with the Evergreen Environmental Foundation (Evergreen) and the City of Toronto (the City) to enable the adaptive re-use of the heritage and cultural resources of the Toronto Don Valley Brick Works (Brick Works);**

**THAT staff be authorized to enter into negotiations with the City of Toronto and the Evergreen Environmental Foundation to formulate a lease of 21 years less a day on terms and conditions as set out in the Memorandum of Understanding and satisfactory to TRCA staff and solicitor;**

**THAT staff work collaboratively with Evergreen and the City by recognizing the Brick Works project as an important priority for third party funding to be raised by Evergreen to complete the project;**

**THAT staff work with the City and Evergreen to devise the appropriate trail connection from the Brick Works to the Don Valley trail system and links to Todmorden Mills;**

**AND FURTHER THAT staff be directed and authorized to take the necessary action to give effect to the foregoing including the signing of documents on behalf of TRCA.**

**BACKGROUND**

In September of 2003, the City of Toronto designated Evergreen as the preferred proponent following a call for proposals to adaptively re-use the designated heritage and cultural features of the Don Valley Brick Works. Evergreen proposes to create "Evergreen Gardens", a centre devoted to environmental learning and urban ecology. TRCA staff cooperated with the City in reviewing proposals and has been working with the City staff steering committee to prepare the MOU.

The Brick Works site was acquired by TRCA under an expropriation order in 1987. The attached drawing illustrates the site and its buildings. The site is under management agreement with the City of Toronto. Staff has confirmed with our solicitor that the proposed use of the site is consistent with the purposes for which the site was expropriated.

Evergreen is a charitable, non-profit organization that has been active in environmental programs in Toronto for some time. For example, in partnership with many schools and communities, Evergreen has successfully regenerated a large number of school yards.

## **RATIONALE**

Evergreen has developed a capital fundraising strategy and a vision of an exciting Toronto destination on the themes of community, culture and urban ecology. Evergreen proposes to convert the large shed building into a native plant nursery and a garden centre. In addition, there will be demonstration gardens, including a children's teaching garden, market space, community space for meetings and public programming, food outlets, an amphitheatre for outdoor performing arts and office space for the Evergreen national headquarters. Partnering primarily with other like minded and community based organizations, the balance of the buildings on site would be used for heritage and cultural community uses respecting the themes of youth and leadership, visual arts and music, health and wellness, food and nutrition, ecological and heritage interpretation. To ensure that all programming and tenant use of the site is consistent with the vision and themes, all sub-tenants will be required to conform to a "charter" of themes and prescribed uses.

Evergreen proposes through fundraising to raise \$25 million for this project. Evergreen cannot guarantee the level of investment will be achieved and so the MOU provides for phasing of the lease. When the first \$10 million is secured, Evergreen will be entitled to lease the larger industrial sheds known as buildings 12, 13, 14, 15 and 16. When the next \$10 million is raised, the balance of the buildings and lands within the industrial pad will be leased.

The area of the site known as the quarry, including features such as the Weston Quarry Garden, will not be part of the lease and will continue to be managed and maintained by the City. Evergreen will be granted a non-exclusive licence for the use of the quarry. Evergreen under the terms of the lease will be responsible for all maintenance and restoration of the buildings.

While some restoration has been completed, many of the Brick Works buildings are in generally poor condition. Restoration of the heritage buildings will require extensive financial resources. The City, as manager, and potentially TRCA as the owner, will face substantial costs to restore and repair the buildings in the immediate future. The proposal from Evergreen will enable the restoration to proceed.

Staff have assessed the risks of pursuing the proposal. A city report points out that if Evergreen were to fail, the City and TRCA would inherit a partially improved site and have to deal with potentially disadvantaged tenants but no significant capital or programming obligations. Without the proposal, the City is faced with finding significant capital and operating funds to restore and secure the site.

In summary, the Evergreen proposal represents the best available opportunity for TRCA and the City to fulfill their heritage and cultural objectives for the Brick Works. For TRCA, the Evergreen proposal is consistent with The Living City vision and will help advance many of our sustainability objectives. The City will have a vibrant renewed heritage attraction for public recreation, learning and enjoyment.

#### **DETAILS OF WORK TO BE DONE**

The MOU sets out the terms and conditions for negotiation of the lease and licence agreements. Copies of the MOU will be available at the meeting upon request. Staff will now negotiate the lease in consultation with the City. If a lease satisfactory to TRCA, cannot be negotiated, then the proposal is ended.

#### **FINANCIAL DETAILS**

The costs to date have involved staff time and some modest legal fees. The TRCA and the City will be required to make reasonable efforts to secure the trail connection, the cost of which has yet to be determined. There are no other significant obligations except to support Evergreen in their fundraising efforts for the project.

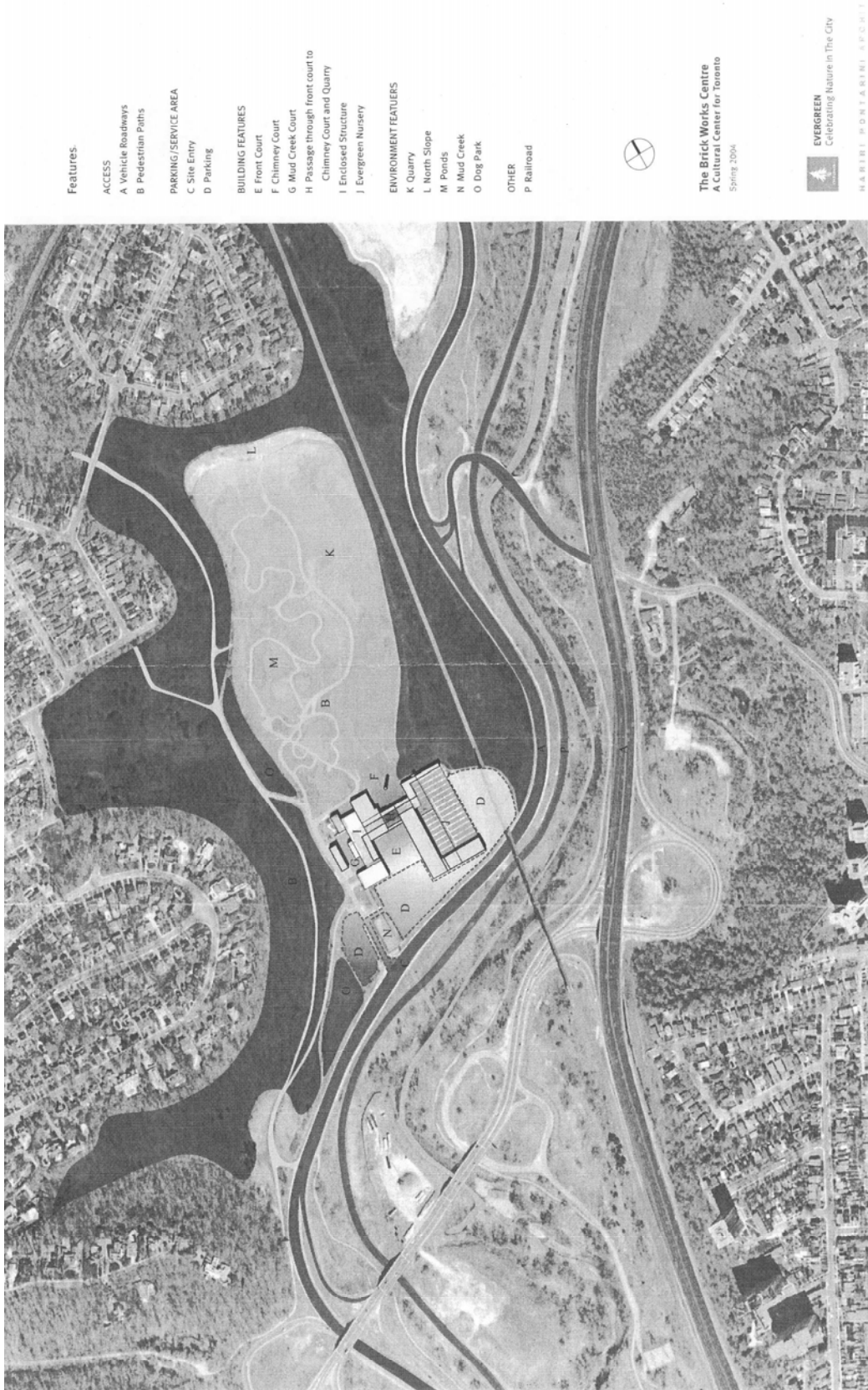
**Report prepared by: Jim Dillane, extension 6292**

**For Information contact: Jim Dillane, extension 6292, Adele Freeman, extension 5238**

**Date: September 17, 2004**

**Attachments: 1**

# Attachment 1



**TO:** Chair and Members of the Sustainable Communities Board  
Meeting #5/04, October 1, 2004

**FROM:** James W. Dillane, Director, Finance and Business Development

**RE: USE OF BIODIESEL FUEL**

---

**KEY ISSUE**

Use of biodiesel fuel in Toronto and Region Conservation Authority vehicles and equipment

**RECOMMENDATION**

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT Toronto and Region Conservation Authority (TRCA) implement a biodiesel program for equipment at the Environmental Services yard, Kortright Centre for Conservation and the Claremont Field Centre;**

**AND FURTHER THAT staff report to the Sustainable Communities Board annually on the results of using the biodiesel fuel in TRCA vehicles and equipment.**

**BACKGROUND**

At the April 2, 2004, meeting of the Sustainable Communities Board, a report on biodiesel fuel was requested, including discussion of storage issues and use of it in the Canadian climate. Biodiesel (fatty acid alkyl esters) is a cleaner-burning diesel replacement made from natural, renewable sources such as new and used vegetable oils and animal fats. Fats and oils are chemically reacted with an alcohol (methanol is the usual choice) to produce chemical compounds known as fat acid methyl esters. Biodiesel is the name given to these esters when they're intended for use as fuel.

**RATIONALE**

Using biodiesel in conventional diesel engines substantially reduces emissions of unburned hydrocarbons, carbon monoxide, sulfates, polycyclic and particulate matter. These reductions increase as the amount of biodiesel blended into diesel fuel increases. Emissions of nitrogen oxides increase with the concentration of biodiesel in the fuel and some additives are used to decrease nitrogen oxides. Biodiesel has superior lubricity which reduces wear and tear on engines and makes engine components last longer. Biodiesel also has properties that clean fuel tanks and fuel injectors in motors.

Just like petroleum diesel, biodiesel operates in compression ignition engines. Blends of up to 20% biodiesel (mixed with petroleum diesel fuels) can be used in nearly all diesel equipment and is compatible with most storage and distribution equipment. These low level blends (20% and less) generally do not require any engine modifications. Biodiesel can provide the same payload capacity as petroleum diesel fuel. Higher blends, even pure biodiesel (100% biodiesel, or B100), can be used in many engines built since 1994, but the engines may require modifications for proper operation. Equipment made before 1993 may have rubber seals in fuel pumps and fuel systems that could fail if 100% biodiesel is used.

Biodiesel has a higher cloud point (point in which temperature effects its flow) than petroleum based diesel, therefore storing of fuel and equipment outside during the cold months can cause some operating problems. These problems can be minimized by storing the equipment overnight in heated garages, using a B5 (5% of biodiesel) blend grade one fuel during the coldest months of the year. After the coldest months of the year have passed, the amount of biodiesel is usually increased to 20% (Blend B20).

Biodiesel does not require any special storage facilities Regular storage tanks meeting Ministry of Consumer and Business Services standards can be used to store and dispense Biodiesel. Because of the detergent agents in the Biodiesel, it is important to change fuel filters on the equipment, particularly in the first few months of using the biodiesel in the equipment.

This fall, TRCA will start using biodiesel fuel at three locations. The sites chosen are the Environmental Services yard on Rutherford Road, City of Vaughan, the Kortright Centre for Conservation on Pine Valley Drive, City of Vaughan and the Claremont Field Centre in the City of Pickering. These locations operate the entire year and have a variety of landscaping and snow removal equipment presently using petroleum based diesel fuel. TRCA staff will monitor the performance and maintenance of the equipment utilizing biodiesel and prepare a report on the use of the biodiesel in this equipment. After one year of use at these locations staff will make recommendations regarding expanding the use of the biodiesel to all TRCA facilities.

#### **FINANCIAL DETAILS**

The cost of B20 biodiesel is approximately 20 cents/litre higher than regular petroleum based coloured diesel. Staff will analyze the increased cost over the next year to determine the implications of the higher per unit cost versus any efficiencies achieved and the value of improved environmental performance.

The Kortright Centre for Conservation and the Claremont Field Centre require new fueling facilities because of the age of the existing infrastructure at these locations and therefore are recommended to be replaced with biodiesel facilities. The cost of upgrading the fueling facilities at both locations is \$4,000 each. The fuel storage facilities at the Environmental Services site meet the standards of the Ministry of Consumer and Business Services. The fuel storage tanks at the Environmental Services yard will only require cleaning at an approximate cost of \$500. Combined use of diesel fuel between the three locations is approximately 7,000 litres. These costs have been provided for in various budgets for 2004.

**Report prepared by: Jim Tucker, extension 5247**

**For Information contact: Jim Tucker extension 5247; Brian Dundas, extension 5262**

**Date: September 17, 2004**