




PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

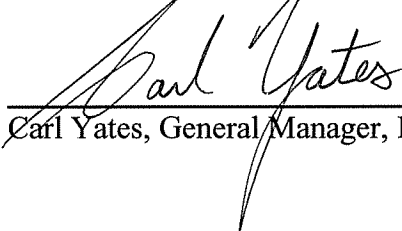
4.

Halifax Regional Council
May 17, 2005

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



for Brad Anguish, Director, Environmental Management Services


Carl Yates, General Manager, Halifax Regional Water Commission

DATE: May 3, 2005

SUBJECT: Proposed Medical Waste Facility, Mt. Uniacke Business Park

INFORMATION REPORT

ORIGIN

Regional Council meeting April 26, 2005, Item 12.7 - request for report.

BACKGROUND

Medic Delivery Services has been selected by the Nova Scotia Department of Health as the preferred service provider to transport and treat approximately 2,300 tonnes of biomedical waste annually which is generated within Nova Scotia.

“The company will collect the waste from hospitals and treat it at a new facility it will build in the Uniacke Industrial Park, about 20 kilometres from Sackville on Highway 101. The waste will be shredded, chemically treated and reduced by 90 per cent before being transferred to a landfill site that is scheduled to open in West Hants in January, 2006. (Dept. Of Health Press Release, April 6, 2005)”.

The proposed location of the facility (see attachment #1) is within 1 km of the boundary of the protected watershed area for the Pockwock water supply, and is outside but very near the boundary of the natural watershed which drains to Pockwock Lake. The “protected watershed” boundary (defined under Provincial regulations) covers a smaller area than the natural watershed drainage boundary. The actual proposed site is in the Mount Uniacke Business Park, within the Municipality of East Hants.

The facility will be subject to a Class 1 Environmental Assessment process under NSDEL regulations. The proponent must register the undertaking, and a period is provided for public comment. The Minister may then decide to deny the project, to approve it subject to permitting requirements, or to require further assessment. The project has not yet been registered under this process. The siting of the facility in the Mount Uniacke Business Park is subject to a Development Agreement by the Municipality of East Hants.

A public information session was held May 2, 2005 in Mount Uniacke, hosted by the proponents (Medic Delivery Services), to inform local residents about the facility. Considerable public concern was expressed at this meeting, which was attended by HRM and HRWC staff. Attachment # 2, "Project Briefing" was distributed by Medic Delivery Services at the public meeting.

DISCUSSION

Some of the issues which have been raised concerning this proposed facility include:

- the safety of trucking medical wastes from metro and other hospitals,
- possible discharges from the facility to air or water,
- contamination of soils and groundwater from spills, and
- migration of contaminants into the Pockwock watershed and water supply.

While the proposed location does lie just outside the natural watershed boundary of the Pockwock system, there remains some low level of risk that any liquid discharge or spill from the site might migrate off-site in groundwater. Groundwater flow does not always follow surface contours, so there is some residual risk that contaminants could enter the Pockwock system. While the risk appears

low, much effort has been dedicated by HRWC in the past to establishing pristine water supplies. HRWC believes this is best maintained by preventing rather than managing even low level risks. Regardless of the actual risk, there is also the issue of public perception of risk, and confidence in the water supply for a large area of HRM.

The proponent's description of the facility to date has included measures to avoid any off-site migration of contaminants. However, until a full description is provided in the environmental assessment registration, no conclusion may be drawn regarding safety. It may be HRM and HRWC's position that a full hydro-geological technical study should be required to establish groundwater flow patterns in this area, as part of the assessment requirements.

The proponent has been in contact with HRWC staff. The proponent has advised that the intent is that there will be no air or wastewater emissions from this facility. However, there is also some concern about the potential for unintended emissions that could occur through accidents or malevolent acts. The proponent has indicated that they are prepared to share further information with HRM and HRWC in advance of the EA filing.

The provincial Department of Health has indicated that they have no comment on the facility at this time, pending the environmental assessment process. NSDEL has been in contact with the proponent, and has advised them of the need to register the proposal.

HRWC, as part of its watershed stewardship, has begun a number of initiatives to engage key stakeholders and solicit the technical detail needed to begin assessing the true risks. This includes discussion with the Pockwock Watershed Management Committee, which includes HRWC, NSDEL and DNR staff and meets 3 times per year. They will have presentations from East Hants development staff and possibly the proponents' consultants at their May 11, 2005 meeting. HRWC also maintains a Water Quality Committee which includes the Medical Officer of Health, HRWC and NSDEL staff. This topic will be brought to their next meeting, likely in June. HRWC has also begun a dialogue with the proponents' consultants, aimed at getting technical detail, so that HRWC can assess risks in advance of the start of the EA process.

Once the assessment registration has been made public by NSDEL, HRM and HRWC will have the opportunity to provide comments and concerns to the Minister, and to state our position regarding the acceptability of this facility from an environmental and human health perspective.

BUDGET IMPLICATIONS

None at this time.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

None, unless Council wishes to advise the Province or the Municipality of East Hants of a position prior to the environmental assessment and approval processes.

ATTACHMENTS

Attachment # 1 - Plan map of the Mount Uniacke Business Park.
Attachment # 2 - Medic Delivery Services "Project Briefing" paper.

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Financial Review by:

May 6/05

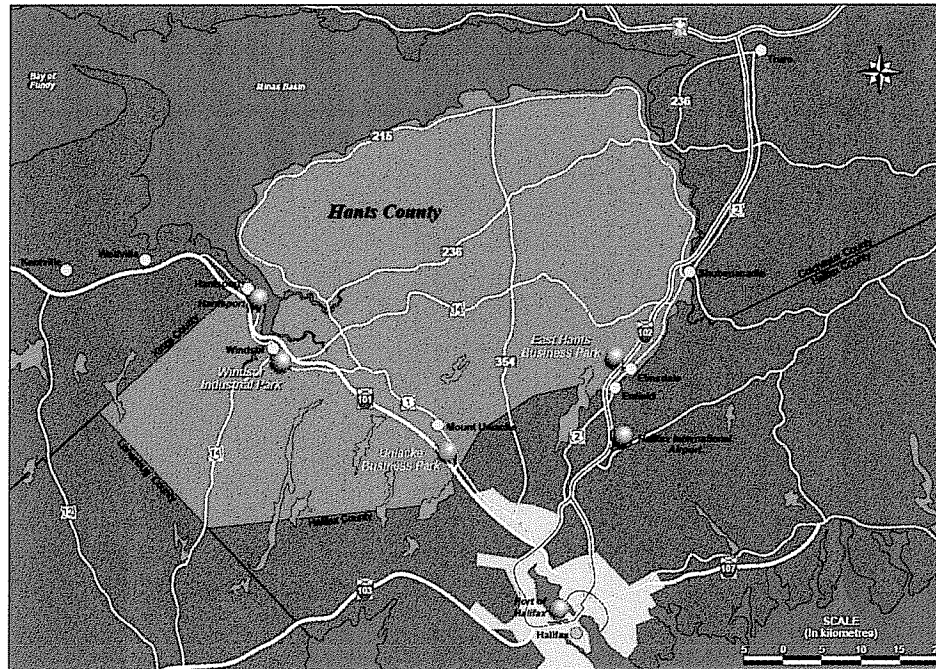
Kellea Redden May 10/05
Kellea Redden, CMA, Financial Consultant (EMS / P&D)

Report Prepared by:

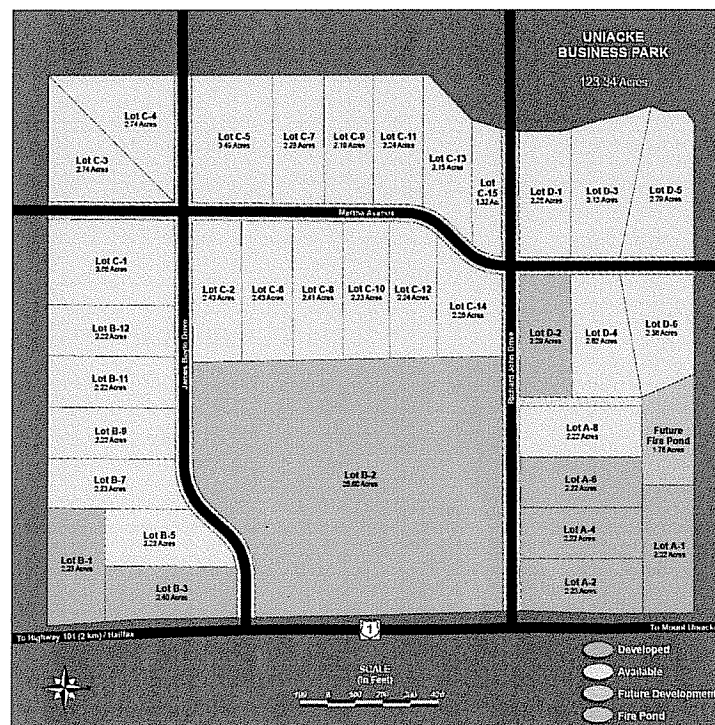
Tony Blouin
Tony Blouin, Manager of Environmental Performance, 490-4610

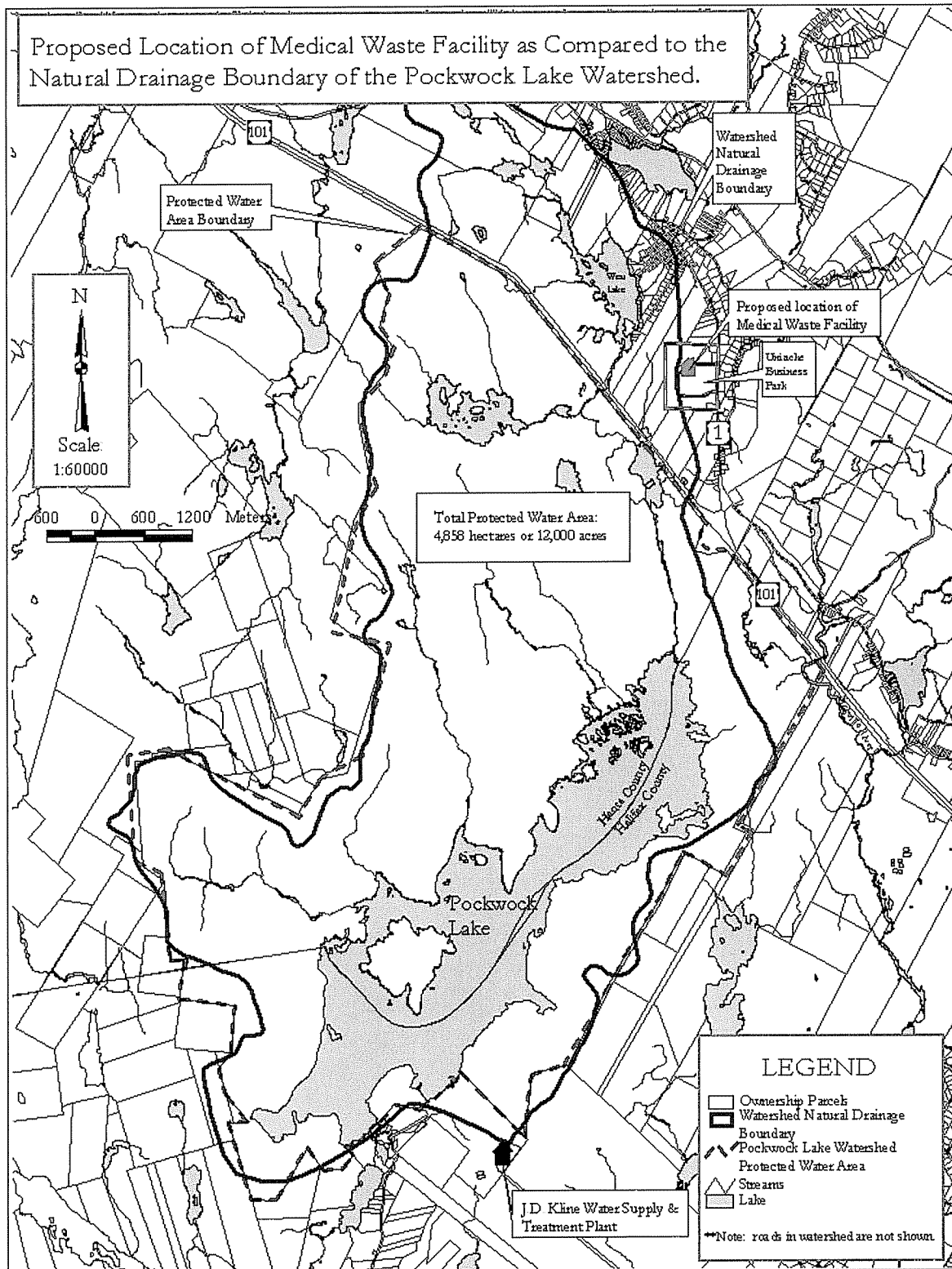
Reid Campbell
Reid Campbell, Manager of Plant Operations, 490-4877

Attachment # 1 - Plan map of the Mount Uniacke Business Park
(From Province of Nova Scotia publication, "Uniacke Business Park", 2004).



Proposed facility location is Lot #C-14





Attachment # 2 - Medic Delivery Services "Project Briefing" paper.

***Proposed Medical Waste Treatment Facility
East Hants Business Park, Mount Uniacke***

PROJECT BRIEFING

Background

The requirement for a new medical waste treatment facility has been made necessary by the closure of the Cape Breton Municipal incinerator scheduled for December 31, 2005. This is due, in part, because of the desire of the province of Nova Scotia to move away from incineration of wastes as a disposal option. Medic Delivery Services Limited (Medic Delivery) has been collecting and transporting waste to Cape Breton Regional Municipality (CBRM) for the past six years. During this time, we have been working hard to develop an alternative waste treatment option for medical waste. This work has included the research and selection of the physical-chemical process system. This technology was selected because it was highly effective, produced no air or wastewater emissions and rendered the sterile waste suitable for landfill disposal.

Anticipating the closure of the Cape Breton incinerator, Medic Delivery proceeded in 1998 with an Environmental Assessment application of the system for a site within the Bayer's Lake Business Park. The Minister of the Environment approved the technology, however the incinerator did not close in 1999 and the processing site in Bayer's Lake has subsequently been purchased by others and developed for other endeavors. Since then, we have had the opportunity to see the process in operation. We have also completed a Pilot Demonstration of the system by arranging for a mobile version of the same system to be transported to Nova Scotia. The Nova Scotia Department of Environment and Labour (NSDEL) approved the pilot project and both regulators and media witnessed the demonstration. Testing confirmed that the system was effective in processing medical waste into a sterile inert waste suitable for landfill. Testing also confirmed there were no odours and no harmful air emissions.

With the announcement of the incinerator closure, the Province initiated a Public Tender process. This Tender allowed Medic Delivery to prepare a competitive proposal.

What is Medical Waste?

Medical waste is segregated by hospitals into Yellow Bag and Red Bag waste. Yellow Bag waste makes up 95-97% of the medical waste stream and contains materials that would normally be placed in the municipal garbage, if not for the fact it was generated inside the healthcare facility.



Red Bag waste contains materials that may have come into contact with blood or body fluids. This includes blood and blood soaked material, sharps (inside plastic sharps containers) and anatomical waste. Anatomical waste may include tissue from pathology labs that has been released by the health care professionals as waste. The proposed technology can process both red and yellow bag waste.

The Public Health Agency of Canada states the following about medical waste:

"There is no epidemiological evidence to suggest that hospital waste is any more infective than residential waste, or that hospital waste disposal practices have caused disease in sanitary engineers, landfill workers, or other persons in the community. Medical waste is comparable to residential waste in microbial content, and can be safely disposed, untreated, in properly managed landfills if appropriate procedures are followed." (PHAC - Volume 23S3 - May 1997)

Technology

The proposed technology is a physical - chemical disinfection process (no incineration). The processing system is a batch system and completely contained. The only emission from the system is the treated sterile waste. There are no wastewater discharges. There are no odours and no harmful air emissions. The process has two primary stages, the first is a mechanical shredder and disinfection stage, and the second is a pressurized disinfection stage. The shredder ensures that all waste is completely exposed to the disinfection solution of sodium hypochlorite and water. Once the material is shredded and disinfected, it is transferred to a second stage disinfection tank where additional sodium hypochlorite solution is added and the tank is pressurized to ensure complete penetration of the disinfection solution. Approximately 300 kilograms of medical waste can be treated in each batch. The waste at this point is sterile and safe for landfill disposal (as documented by correspondence from the NSDEL).

The sterile waste is discharged to a compaction bin and collected by Canadian Waste Management for disposal. The sodium hypochlorite is absorbed during the treatment process. Water consumption for the process is minimal and can be supplied by a typical residential well capacity. There are no floor drains in the proposed building and all wash waters and related drainage are recycled back into the process.

The sodium hypochlorite solution is a common commercial commodity, and available off-the-shelf. Bulk volumes of sodium hypochlorite will not be stored at the facility. A commercial tote tank (200 liters) will be delivered on an as-required basis. The sodium hypochlorite will be stored in a dedicated area with complete spill containment. We have



reviewed the chemical storage and handling requirements with suppliers, regulators and the Fire Chief in Uniacke.

The processing system and promotional video can be viewed at www.medwastetec.com

Site Selection

The processing system requires little in the way of municipal services. There are no wastewater discharges and the water demand can be satisfied by an on-site well. The system requires a standard 3-phase power supply. Transfer trailers currently collect the waste material and therefore proximity to a 100 series highway was desirable. The centre of waste generation is Metro Halifax, and the site of the landfill is West Hants. When we put these criteria together we identified the advantages that the Uniacke Business Park offers. This site, along with other sites in the Halifax area, was considered. The owner of Medic Delivery maintains a residential property in East Hants (Coxcomb Lake) and resides there approximately eight months of the year. The owner was excited about the opportunity to bring their business to East Hants. We are aware a development agreement is also required.

We have confirmed that the site is suitable for septic (C-3), as there will be four employees located there. The engineers have completed the building pre-design phase and are now working with municipal staff to advance the development agreement application. We have also visited the site with representatives of the Sackville Rivers Association (Walter Regan) and have reviewed the operation with the Halifax Water Commission watershed protection officer.

Approvals Process

The proposed facility will require a Provincial Environmental Assessment. The assessment application has been initiated and will include a comprehensive study of the proposed site. The NSDEL contact is Helen MacPhail, phone number 424-3960.

A Waste Management Approval is required from the Regional NSDEL office; the contact for this is Bernie Matlock, phone number 424-7773.

A Municipal Development Agreement Approval is also required from the Municipality of East Hants; the contact for this is Darrell Joudrey.



Final Thoughts

Medic Delivery has been involved in the collection and disposal of medical waste in Nova Scotia since 1990. The company currently collects, inventories and transports all provincially generated medical waste for disposal. Medic Delivery has invested their resources studying the proposed technology and has completed a demonstration program to confirm the effectiveness of the process. Medic Delivery retained SNC-Lavalin Inc. to ensure that the treatment process is safe and will be sited in accordance with all required permits and approvals.

Peter Caldarozzi, owner of Medic Delivery, has been speaking to residents of the area regarding this new venture. For the most part the reception has been positive. However, a few residents are absolutely against the proposal. We appreciate that the public would want to understand the proposal and be reassured that the proposed facility will be completely safe and have no negative impact on the natural environment. Peter has made this commitment to the residents, importantly, his two sons work in his medical waste transfer station now and will work at this facility as well.

We are also excited about the opportunity to bring economic benefits to the Municipality and offering both employment (four jobs), and construction opportunities (one million dollars of capital investment).

Thank-you for your time. Please contact either Peter or myself at any time.

Peter Caldarozzi - 499-9932

David Haley - 209-4710

