

## Executive Summary

### Lambton County Waste Management Master Plan

The purpose of this report is to provide a summary of the overall waste management solution achieved by the County of Lambton through their long term waste management agreement with Philip Environmental and how this solution satisfies the requirements of the Waste Management Master Plan.

In 1986 the County of Lambton and the City of Sarnia jointly initiated a study to produce a Waste Management Master Plan (WMMP) for the County of Lambton. The purpose of the Waste Management Master Plan was to identify waste management activities and initiatives to address the long term (25 year period) waste management needs of the County.

The goal of the Lambton County WMMP process was to develop the best system for the long-term management of municipal solid wastes in the County. The specific objectives were to define a system that would; minimize impacts on the environment, minimize true costs, and maximize service to the people in Lambton County.

Consistent with the above goal and objectives, a basic premise in developing the plan was to develop a system that would provide for maximum waste diversion. The emphasis on diversion is consistent with the Ministry of the Environment & Energy's (MOEE) target for Ontario to divert at least 50% of wastes from disposal by the year 2000.

The long-term planning assumption, at the time of development of the WMMP, was that **the County would pursue public sector solutions for waste management needs unless and until private sector solutions were in place.** Although the public sector solution was considered a wise premise for planning, the potential role of the private sector was nevertheless acknowledged. The WMMP was developed as a "public" solution, that is, it was recognized that although the private sector may be able to fulfil some, or all, of the plan's components the County should not rely solely on the private sector.

As a result, while the public process was being developed, a parallel process was followed whereby the private sector options available to the County were canvassed. The County solicited interest in the form of proposals from private waste management companies in the area. In August 1992 County Council gave approval to proceed with discussions with Philip Environmental concerning landfill capacity for 20 years, options for waste reduction, reuse, and/or recycling measures to meet or exceed provincial guidelines. At this time Philip's proposals could not meet the County's need's without extensive environmental hearings resulting in lengthy delays. Time was of the essence given the relatively little public landfill capacity remaining in the County.

The WMMP process continued and in November 1994 the Draft Lambton County Waste Management Master Plan was accepted by County Council. The WMMP a included provision for a new waste management facility, which would include landfill capacity, composting, and a materials recovery facility as well as recommendations for enhanced blue box recycling, collection of curbside compostables and backyard composting.

In January 1995 County Council was faced with a further expenditure of \$1.4 million to begin detailed work on the preferred site. As a result County Council directed a committee composed of staff, the warden and the committee chair to meet with Philip Environmental. The negotiations took on a much more intense nature as County Council required a report by May of 1995. By the deadline of May 1995 a tentative deal had been reached and this proposal was put before Council and accepted in principle with a few items to be finalized. Subsequently the agreement was finalized and announced in July of 1995.

The decision to enter into a long term contract with Philip Environmental rather than develop a new landfill site as identified in the Lambton County Waste Management Master Plan will result in savings of up to \$45,000,000 to County taxpayers over the life of the agreement. The County's biggest hurdle was the import of waste. The contract with Philip Environmental resulted in a long term (25 year) agreement for disposal capacity at the Petrolia Landfill Site. The agreement is multifaceted and includes contracts for services such as: recyclable collection & processing, compostables collection & processing and waste collection. Throughout the process the County's desire was to fully utilize existing landfill capacity at the municipal landfill sites. Most of the County's landfills are under-utilized and relatively expensive to operate. The best way to optimize these sites was through increasing the flow of waste. In order to increase the waste flow and fill the sites faster, additional waste was needed that could not be supplied locally. Philip will supply this waste to the County for which the County will garner revenue. The revenue will be utilized to pay for the closure and post closure costs of the landfills thereby reducing the need for additional tax dollars.

This 25 year agreement with Philip will set a positive direction for:

- landfill disposal capacity
- organics collection and processing
- recycling collection and processing
- waste collection
- rationalization of County landfill capacity
- education and promotion of waste reduction

and this agreement will provide the County with:

- security of landfill for 25 years;
- mechanisms to meet the provincial waste reduction target of 50% diversion from landfill by the year 2000;
- revenue to offset closure and post-closure costs of County landfills;
- utilization and closure of County landfills in approximately 5 years which will reduce the total operating expense of the sites;
- security of fixed tipping fees;
- avoidance of long term debentures related to the development of the WMMP landfill site;
- savings to the County over the 25 year term are estimated to be \$45,000,000.

The Philip agreement was structured such that it will satisfy the objectives of the WMMP by fulfilling the requirements of the various components of the WMMP. The following is a list of the recommended components of the WMMP and the element of the agreement which satisfies the requirement.

- **waste collection** - a pro forma agreement to provide waste collection to all County municipalities at a prescribed cost;
- **source separation/recycling** - a pro forma agreement to provide recycling collection and processing to all County municipalities at a prescribed cost;
- **household composting** - County distribution of backyard composters, education through the proposed County Waste Reduction Co-ordinator;
- **central composting** - a pro forma agreement to provide compostable collection to all County municipalities at a prescribed cost, as well as construction of a central composting facility if required;
- **materials recovery facility** - this service will be provided in conjunction with the source separation/recycling pro forma agreement;
- **transfer stations** - with the new landfill location (Petrolia) transfer stations will not be required, this is not a change from the WMMP recommendations;
- **landfill** - an agreement to provide disposal space guaranteed for 25 years.

Other recommended objectives included development of markets for recyclables, which will be covered by the source separation/recycling pro forma agreement, as well as, system monitoring and public consultation which will be the responsibility of the County Waste Reduction Co-ordinator.

The Philip agreement does not alter the conclusions of the WMMP. Although the agreement will affect the implementation of each of the recommended components of the WMMP. The following is a list of the implementation requirements of the WMMP and the corresponding element of the agreement and an explanation of how this element will satisfy the respective implementation requirement. Where appropriate, alterations have been made to the text of Chapter 8 of Volume 1, "Master Plan Report" to reflect the changes to the implementation requirements. As you will note, these changes are represented in Chapter 8 of the Report as strikethroughs of existing text and/or insertion of new text in italics.

1. **Identification of the administration and jurisdictional responsibility for each system component or waste diversion initiative.** Since the agreement provides for guaranteed landfill availability, landfill space is no longer dependent on the level of waste diversion achieved. Therefore the importance of the County having control over the waste diversion and processing efforts is decreased. As such, the County has chosen to fill a co-ordination role between the local municipalities and Philip for implementing the waste diversion strategies. This role is achieved through the pro forma agreements providing affordable and equitable collection and processing of refuse, recyclables and compostables, while letting the local municipalities choose the services they require. This will result in a more unified approach to diversion across the County, maximizing the efficiency and cost effectiveness of waste diversion activities, without the County taking responsibility for all waste services. This mirrors the recommendations for Jurisdictional Framework in section 8.3 of the WMMP.

- 2. Identification of the appropriate administrative organization and staffing requirements to implement and operate the components and initiatives.** Subsequent to the implementation of the short-term waste diversion strategy and the adoption of the Draft WMMP in November 1994 the purpose of the Public Advisory Committee was completed. The Public Advisory Committee recommended that since local municipalities would maintain control over collection of waste, that public input concerning waste reduction activities was more appropriately the concern of local councils and residents. Changes to the County personnel structure has resulted in a more streamlined staffing arrangement. This fits with the reduced waste management responsibilities that occur as a result of not constructing a new landfill site. The Waste Management Division of the Public Works Department is now supervised by the Director of Public Works. The Operations Manager is still responsible for overseeing the operations of County landfills. As well, a Waste Reduction Co-ordinator will be hired to provide the educational and waste diversion aspects of the WMMP, while also monitoring and updating the WMMP as required. It is anticipated that the requirement for technical support will be reduced as a result of not constructing a new landfill site. This new structure is reflected on Figure 8.1.
- 3. Identification of the financial framework which is most appropriate to implement each system component or waste diversion initiative and to maintain a financially sustainable system.** The Philip agreement achieves the main goal of this requirement as it provides for a waste management system that is financially sustainable and independent of the distribution of responsibilities between the County and the lower tier municipalities. The County has implemented a direct cost method for recovery of disposal costs from lower tier municipalities, and several municipalities have in turn implemented a direct cost method for the recovery of costs from local generators. This is one of the long-term diversion strategies identified in the WMMP. The use of direct cost recovery in conjunction with the County not assuming control over the waste diversion and processing aspects of the system, greatly simplifies the financial framework. As well, with the inclusion of the pro forma agreements for collection the County has ensured an equitable cost for waste collection/processing among the lower tier municipalities. Under the agreement, revenue from the disposal of waste provided by Philip, at County landfills is accumulated in a reserve fund which will be used to pay for any environmental studies, long-term monitoring and closure costs for the existing County landfills. This fund along with \$55,000 provided annually by Philip will also provide funds to hire the Waste Diversion Co-ordinator and perform studies and/or educational programs, as well as Master Plan updates.
- 4. Determination of the sequence of actions required to implement each component or initiative and the schedule for implementation of the recommended system.** As noted above, the security of landfill space and the County's adoption of a co-ordinating role for the implementation of the long-term diversion strategy has reduced the urgency of implementation of the system components and diversion initiatives of the WMMP. As well, some components have been eliminated from the WMMP. The following is a summary of the components and a description of their sequence of implementation. This new schedule can be seen on Figure 8.2, Proposed Implementation Schedule. It is the County's intention to have a Waste Reduction Co-ordinator in place by 1997.

4. continued

- a) It is anticipated that as the lower tier municipal **waste collection** contracts expire, the municipalities will take advantage of the pro forma agreements that are part of the Philip agreement. It will be the role of the Waste Reduction Co-ordinator to follow up this component of the WMMP.
- b) It is anticipated that as the lower tier municipal **recyclable collection/processing** contracts expire, the municipalities will take advantage of the pro forma agreements that are part of the Philip agreement. It will be the role of the Waste Reduction Co-ordinator to follow up this component of the WMMP.
- c) The County will continue to support **household composting** through the existing backyard composter distribution program. As well, it will be the role of the Waste Reduction Co-ordinator to emphasize this component as part of the educational aspect of the WMMP. Although, it should be noted that the loss of the 2/3 funding from the MOEE will negatively impact the continuing distribution of backyard composters.
- d) **Central composting** is provided for in the pro forma agreements, and if required a central composting facility will be developed. It will be the responsibility of the Waste Reduction Co-ordinator to emphasize this component and develop participation from the lower tier municipalities.
- e) There will not be a need for a **Materials Recovery Facility** since this service is provided as part of the Philip agreement. Therefore, this component will be omitted from the implementation schedule.
- f) The WMMP identified that **transfer stations** would not provide an economic benefit to the waste management system. As well, the fact that the Petrolia landfill is more centrally located in the County will make the direct hauling of waste more convenient. Therefore, this component will be omitted from the implementation schedule.
- g) As the Philip agreement provides for guaranteed landfill capacity there will not be a need to construct a new **landfill site**. Therefore, this component will be omitted from the implementation schedule.

Since accepting the Draft WMMP in November 1994, the County has adopted the Ontario Government waste reduction objectives of 50 % by the year 2000; and implemented a user pay or direct cost recovery system for waste disposal. As noted previously, in the future it will be the responsibility of the Waste Reduction Co-ordinator to monitor and update the WMMP as required. The WMMP will be monitored for all the areas described in Section 8.7 of the WMMP.

A waste management contingency plan is provided for in the Philip agreement. Should Petrolia Landfill reach capacity prior to the termination of the agreement, Philip is committed to provide landfill space at another facility.

The majority of the administration and implementation recommendations have been achieved through the Philip agreement. The remaining recommendations will be achieved when the Waste Reduction Co-ordinator is hired. In addition the recommendation concerning the new landfill will be omitted.