# REGIONAL MUNICIPALITY OF OTTAWA-CARLETON MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

## REPORT RAPPORT

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DATE 27 March 1998

TO/DEST. Coordinator, Planning and Environment Committee

FROM/EXP. Director, Solid Waste Division

**Environment and Transportation Department** 

SUBJECT/OBJET SOLID WASTE COLLECTION CONTRACT DEVELOPMENT

LEVELS OF SERVICE

## **DEPARTMENTAL RECOMMENDATIONS**

That the Planning and Environment Committee recommend that Council approve the following service level changes to the next Solid Waste Collection Contract beginning in June 1999:

- 1. The implementation of a program to collect and compost organic materials from curbside households, to be phased in over the life of the next collection contract;
- 2. The alternate week collection of blue box materials (glass, metal, plastic and polycoat containers) on one week and all paper materials on the next week;
- 3. The provision of an additional box to all curbside service households for storage and set out of all paper materials (hereinafter referred to as a fibre box);
- 4. The following changes be made in the Contract;
  - a) The collection of leaf and yard waste during peak periods to occur over an extended work day (additional two hours per day);
  - b) The modification of the levels of service for bulky materials, such as sofas and mattresses, to allow for pick up on the day following the scheduled collection day;
  - c) The discontinuation of curbside collection of tires, as residents now have the option of the Regionally sponsored "Take It Back" product stewardship program.

## **BACKGROUND**

In January 1995, the Regional Municipality of Ottawa-Carleton (RMOC) assumed responsibility for the collection of solid waste from the municipalities of Ottawa, Nepean, Gloucester, Kanata, Cumberland, Vanier, Goulbourn, West Carleton, Rideau and Rockcliffe. During the current collection contract that expires on 31 May 1999, the levels of service provided to Regional residents were standardized and generally enhanced with respect to garbage, recyclables and leaf and yard waste, including Christmas trees.

As recommended in the 3Rs Study, approved by Regional Council in 1995, the Region's Solid Waste Division (SWD) staff examined a number of programs during the current contract period that will increase waste diversion activity and optimize the current waste collection system. These programs were evaluated according to their diversion potential, cost-effectiveness, public acceptability and technical viability.

Further impetus for this work was provided with the approval of the Regional Official Plan and Council's adoption of a new waste diversion target of 475 kilograms per household per year by the year 2000. Current recycling and composting activities presently take the Region to about 230 kilograms per household per year (curbside plus apartment programs).

## DISCUSSION

### Goals

The recommended changes to the solid waste collection contract, which will affect the levels of service, will help the Region achieve the following goals: increased waste diversion, customer convenience, and fiscal responsibility.

## **Organics**

In the Organics Diversion Strategy, see Annex A, SWD staff recommend that a program to collect a broad range of organic material be implemented over the life of the next contract. The start of the proposed phase-in schedule is illustrated in Annex B.

The blue box program was also phased in throughout the Region, beginning with the most cost-effective areas. Over a five-year contract, based on current plans, organics collection would reach over 140,000 households. In the following years, SWD staff would work towards full implementation.

*Diversion:* This diversion program, which is Option #37 in the 3Rs Study, was recently piloted in five RMOC neighbourhoods, from October 1996 to October 1997, with great success. Based on the pilot results, an organics program would move the Region substantially towards its diversion target by more then doubling the diversion of leaf and yard (now 20,000 tonne per year) to 48,000 tonnes per year of organic material.

Customer Convenience: In terms of service levels, organics diversion would simply be an extension of the leaf and yard program for each area as it is phased in. To facilitate participation in the program, each curbside household would be provided with a 240 litre (64 gallon) wheeled cart and a 6 litre "kitchen catcher". The specially designed cart minimizes potential odours. Pilot surveys showed strong support for the catcher which is used to transfer kitchen food waste to the cart, while the cart itself is big enough for food scraps, non-recyclable paper and garden waste. The pilot also suggests that over 80 percent of residents would participate (current blue box participation rate is 77 percent).

*Fiscal Responsibility:* Collection would take place every other week all year round. To minimize collection costs, St. Thomas, Caledon, Halifax, Lunenburg, Montreal and Laval collect organic materials in wheeled carts every second week. The pilot indicated that this was an acceptable schedule especially with the large cart. The carts have 10-year warranties.

## Leaf and Yard Waste

Solid Waste Division staff recommend that the hours of operation be extended during the peak collection periods from eleven hours per day to thirteen, requiring completion by 8:00 p.m. To accommodate the proposed schedule change, the Region's leaf and yard waste composting facility would also have to extend its hours to enable the haulers to maximize their on-route collection time.

Customer Convenience: The longer collection day represents a change to current levels of service and householders would need to be well informed since trucks would be on the road later than usual (and therefore pick up may be later than usual). The annual leaf and yard waste calendar would make program modifications, such as extended collection hours, perfectly clear. The longer day would ensure that these materials are picked up on the designated collection day and it would increase fiscal responsibility as outlined below.

Fiscal Responsibility: Haulers bidding on the collection of leaf and yard waste typically charge a premium because of the seasonal fluctuations in quantities generated; trucks are either over or under-utilized depending on the time of year. At the very peak of the fall collection, the current contractor uses three times as many trucks than during the summer bi-weekly period – with financial implications to the Region. By extending collection hours during the peak periods, fewer trucks will be required and therefore capital costs should be reduced.

## Recycling

The next collection contract provides an opportunity for the RMOC to improve the way recyclable materials are managed. Recycling programs can now be more efficient, less labour intensive on the street, more convenient to both the householder and collector, and therefore potentially less costly. Many of the new recyclable materials added to the system for the last contract are light and voluminous with various flattening and bundling requirements. Seventeen

different kinds of recyclable material are now recovered instead of the previous seven. With the advancement of processing systems, the need to manually sort recyclables into a multi-compartment truck has diminished. Since collection costs currently represent about 65 percent of the total blue box program (and 35 percent is processing cost), introduction of these measures should improve efficiencies that will reduce costs. A summary of three integrated program changes that relate to levels of service are provided in the following sections. They are:

- collect blue box materials one week and paper materials the next week;
- provide a second household collection box to all curbside customers for paper materials;
- compact recyclable material on trucks to provide residents with the convenience of not having to flatten cardboard boxes or any other voluminous material.

## 1. Alternate Week Collection

With the introduction of a two-stream system and the provision of a second box, the next step is to collect blue box material one week and fibre box material the next week (alternate week collection). The provision of the extra household collection box makes this program change viable.

Customer Convenience: Since the set out of residential recyclable material would change, a short transition period and/or extensive promotion and education would be required. Since the RMOC produces an annual calendar for leaf and yard waste collection, the mechanism already exists for identifying blue box weeks and fibre box weeks.

Fiscal Responsibility: Alternate week collection would increase collection efficiencies and should provide the RMOC with significant cost savings. This is the primary reason for considering this program change.

## 2. Second Household Collection Box

To ensure that savings are actually realized as a result of two stream collection and to maximize public convenience, state-of-the-art programs provide residents with a second box (usually grey or brown) for the storage and set out of paper materials.

*Diversion:* Municipalities in Metro Toronto that provided a separate box for paper realized an overall recovery rate increase of 15 percent while the City of North York reported a 37 percent increase in paper recovery.

Customer Convenience: The fibre box provides all curbside households with added storage and set out capabilities. The extra box simplifies the separation of recyclable materials into two streams.

Fiscal Responsibility: Partners or sponsors will be sought out to reduce the cost of the second boxes. In North York, the end market for that program's paper material provided the fibre boxes for free.

## 3. Compaction of Recyclable Materials

In a two-stream collection system, recyclable materials can be compacted to maximize the load, extend route sizes and reduce truck requirements. The fibre stream can be fully compacted while the blue box stream can be lightly compacted.

*Diversion:* In the current program, boxes that are not flattened are left behind by the hauler (to prevent their trucks from filling up with "air"). With compaction, all boxes would be collected and this would result in increased recovery.

Customer Convenience: The added convenience of not having to flatten or bundle cardboard boxes reduces the need for material preparations typically required of the householder. When asked if less flattening/bundling and a two box system were more convenient than the status quo, 80 percent agreed (and 60 percent strongly agreed).

Fiscal Responsibility: The compaction of recyclable materials should provide the RMOC with significant cost savings because the collection routes will be extended (i.e., more households served per load), fewer trips to the recycling facility will be required and, therefore, fewer trucks should be required.

## Garbage

The following program changes are recommended to reduce collection costs but are highlighted in this levels of service report given the impact they would have on Regional households.

## 1. Collection of Bulky Goods

Collection requirements have been designed to promote side loading, single person trucks able to pick up various material streams (garbage, organics, recyclable containers and paper products). The collection of large waste items or bulky goods, however, cannot be collected in the same truck by one person. Therefore, bulky goods may not be picked up until the end of the following day. The regular collection truck can report the address of uncollected bulky items to a dispatcher who then schedules a pick-up for the following day using a rear loading truck. Separate collection of bulky goods promotes the use of one-person garbage trucks.

Customer Convenience: Residents would have to be informed of this system as it affects the way materials are set out or brought back from the curb.

Fiscal Responsibility: By allowing the hauler to schedule the collection of bulky goods a day later should result in collection cost savings. The hauler would be able to address this material stream with a dedicated bulky goods truck and crew thereby maintaining an efficient collection system for "regular" garbage.

## 2. Automotive Tires

As part of the emerging trend to foster more direct producer/consumer product responsibility, the Region recently launched a "Take It Back" product stewardship program for tires and other items. To help promote and support this new, convenient program and to avoid

needless collection and disposal costs, the Region should ban tires from future curbside collection contracts.

*Diversion:* Automotive tires represent about 1 percent of the residential garbage stream, or approximately 1,500 tonnes per year. Since the generation of used tires is estimated to be one per capita per year, it is evident that most tires are already appropriately managed. The successful diversion of the remaining tires would not have a significant impact on overall diversion levels.

Customer Convenience: In this program, worn out tires, used motor oil, empty propane tanks, antifreeze, batteries and pharmaceuticals are now accepted at twenty "Take It Back" sites and many other locations across the Region and this number is expected to grow. Many residents are already using this system.

Fiscal Responsibility: Given the "Take It Back" program option now available to customers across the Region, the need to maintain a parallel collection service for tires represents a discretionary use of tax dollars.

## **CONSULTATION**

To assist in determining appropriate levels of service, SWD staff updated previous public consultation work that was done to identify various 3Rs options, by conducting two surveys summarized in the next two sub-sections:

## 1. RMOC Recycling Survey

Over a one-week period, starting 15 January 1998, a telephone survey about blue and fibre boxes and different collection frequencies reached two hundred and eighty residents of the RMOC, excluding the Township of Osgoode. The survey results are accurate within a range of plus/minus 5.9 percent, nineteen times out of twenty.

When asked about the convenience of a blue and fibre box system, 80 percent of respondents thought that such a system would be more convenient than a single box and that it would improve the current program. Almost 90 percent of respondents thought that storage of a second box would not be a problem. Another 88 percent said a two box system was a good idea if it did not cost more.

With respect to an alternate week collection service, 75 percent of surveyed residents said they would support such a system if it would save the Region an estimated \$1.5 million per year (staff project even greater savings potential).

### 2. Organic Diversion Pilot Surveys

In another telephone survey, conducted in October 1997, that excluded organic pilot households, 80 percent of residents surveyed said they were at least somewhat likely to

use a curbside organics collection program. The survey results are accurate within a range of plus/minus 4.6 percent, nineteen times out of twenty.

During the one-year pilot, three other surveys were conducted with participants to help Regional staff assess public acceptance for source separation, storage and set out of food and yard waste. The final survey (door-to-door and mail-in) generated a 67 percent response rate from a total of 2,355 households. In summary, the residents who were provided with the wheeled carts, in particular, indicated their satisfaction with the program by providing an 80 percent positive response to questions regarding separation of organics, container storage, size, handling and cart appearance.

Although surveys indicated that monthly wintertime collection in the cart areas would be acceptable, cost savings would actually be minimal since the fleet size would still have to be maintained even if parked. Provision of the larger cart makes every other week collection possible. Almost half of the residents had a preference for bi-weekly or monthly collection in the summer. Other programs have gone with every-other-week collection to minimize costs and residents have adapted to the schedule. In mature programs, virtually no calls are received involving residential complaints or questions.

### 3. Communications Plan

In order to ensure a smooth transition from the current program to the next, SWD staff will report back to Planning and Environment Committee with a communications plan that will support the recommended service level changes required to increase waste diversion, minimize customer disruption and maintain fiscal responsibility. Development of the plan will be based, in part, on lessons learned in the organics pilot in which calendars, newsletters, tags and other communication instruments were used.

#### FINANCIAL IMPACT

A number of service elements have changed, some resulting in cost decreases and others in increases. The proposed program is projected to stay within the funding range of existing programs but enhances diversion allowing us to meet the Regional Official Plan goal. Cost projections of various curbside collection alternatives are provided in Annex C.

Revisions to the recycling part of the Solid Waste Collection Contract should result in considerable cost savings to the Region. Longer collection hours for leaf and yard waste during peak periods and simplification of certain other collection procedures should reduce the number of vehicles required to perform the contract.

Since the collection of organic material represents an expansion of existing service levels, a slightly higher program cost is anticipated for this component. In the long run, the financial benefits of increasing waste diversion will be realized in the form of savings associated with deferral of costs to replace existing landfill capacity.

## **CONCLUSION**

After managing the RMOC's first collection contract, SWD staff has identified a number of ways to improve collection efficiencies and increase waste diversion. The contract tender process is an ideal opportunity to assess system options and compare program costs. Proposed changes to the Region's waste collection programs would require some modification of current levels of service but with an overall positive impact in terms of diversion, customer convenience and fiscal responsibility.

In summary, it is proposed that the recommended service level changes contained in this report, be approved by the Planning and Environment Committee and Council so that the next Solid Waste Collection Contract Tender can be revised as required.

Approved by P. McNally, P.Eng.

RS/mm

Attach. (3)

## REGIONAL MUNICIPALITY OF OTTAWA-CARLETON ORGANICS DIVERSION STRATEGY

The Regional Municipality of Ottawa-Carleton's Organics Diversion Strategy has been developed in order to address a significant part of the residential waste stream. However, this strategy document represents staff recommendations only and is subject to Regional Council review and approval.

The strategy is based on a variety of inputs: one-year Regional Municipality of Ottawa Carleton (RMOC) organics pilot, consultation with potential composting operators<sup>10</sup>, discussion with other municipal officials, literature review and careful consideration by staff. Further impetus for preparing this strategy is the Region's 3Rs Study which was received and approved by Council in 1995: The Study's Option #37 identifies a "residential 3 stream collection system" as a primary waste diversion option.

#### 1.0 BACKGROUND

The Regional Council's Official Plan specifies a diversion target of 475 kilograms per household per year by 2000. Current blue box and leaf and yard waste (LYW) programs fall short of the target by 245 kg/hh/yr. Based on the pilot results, the inclusion of residential organics would enable the Region to reach the Official Plan target, assuming full program implementation. However, given the proposed implementation timeframe, the target will not be met across the whole Region until approximately 2005.

Pilot data suggest that a region-wide program would divert 60,000 tonnes/year of residential food and garden waste (assuming 292 kg/household/year). It is estimated that an additional 40-60,000 t/yr are available in the commercial sector.

## 2.0 STRATEGY

The Region's organics management strategy has three specific goals: (i) maximize waste diversion; (ii) maximize cost-effectiveness; and (iii) maintain customer convenience. With a view towards these goals, the following organic program elements are specified:

- Implement curbside collection of organics over a 4-6 year period.
- Support the development of multiple composting facilities across the Region.
- Award long term contracts to private sector operators.
- Establish a Regional composting facility at Trail Road Landfill Site for organics (while maintaining the existing LYW program).

The following sections discuss each of these elements in greater detail:

<sup>&</sup>lt;sup>1</sup> Use of the term "composting" in this document is meant to include "organics processing" for those vendors whose systems involve anaerobic digestion, fermentation or some other method.

## 2.1 Four-Six Year Implementation

The Region proposes to phase-in the first part of the curbside organics collection over the life of the next collection contract years starting in 1999 (see Section 3.0 for proposed schedule). A relatively long implementation period allows for the development of compost markets, effective management of cart distribution and the development, refinement and maintenance of an effective and efficient promotional and education campaign.

## advantages

- implementation costs are spread out.
- "big bang" approach would be logistically difficult.
- incorporate lessons learned from initial phases.

## <u>disadvantages</u>

- diversion of material from landfill disposal is delayed.
- the phase-in approach means some communities would wait longer for the program than others.

## 2.2 <u>Multiple Composting Facilities</u>

Based on vendor input (Dec-97), there is considerable disagreement regarding optimal facility size. Notwithstanding Regional staff's preference for multiple operators, facility capacity and methods of operation are MOE Certificate of Approval issues. To satisfy its own requirements, however, the Region can simply tender multiple contracts for residential organics. The primary benefit of strategically located, multiple facilities is that they would minimize haulage distance and costs.

#### advantages

- minimizes hauling distances and costs.
- promotes competitive pricing structure.
- avoids single facility reliance and associated risks.

## disadvantages

- presents private sector siting challenges.
- administratively more complex (e.g. tendering).
- risk of too much composting infrastructure.

## 2.3 Long Term Contracts

The Region plans to keep composting facility tenders separate from collection activities. Tendering would be staggered to accommodate the phase-in of households and to allow sufficient time for qualified vendors to get Certificates of Approval and to establish their operations. Based on operator input, typical facility capitalization time is estimated to be 1-2 years although some firms could be ready much sooner. Composting contracts will be tendered out for 5 and 10 years and awarded according to best bid.

#### advantages

- longer contracts may provide better bids per tonne.
- Regional contract provides steady cash flow while private operators develop commercial organic clients.
- allows for development of long term markets.

## disadvantages

 longer contracts make it difficult to adopt to future technical improvements or to take advantage of potential cost reduction opportunities.

## 2.4 Regional Composting Facility

The organic diversion strategy recommends that the Region become an active composting player. This approach enables the Region to act as a back up facility for private sector operators that may close for unforeseen or unavoidable reasons. In this regard therefore a facility at Trail Road Landfill Site (TRLS) with excess capacity should be established as soon as possible. A Regional facility can effect tip fees in the same way that TRLS allows the Region to influence garbage disposal fees.

## advantages

- Regional composting operation provides baseline costs with which to assess private sector bids.
- establishes back up requirement for Regional collection program.
- provides the Region with its own compost supply.
- by operating its own facility, the Region becomes an "educated" purchaser of services.

#### disadvantages

- public versus private costing issues.
- the Region requires time to develop appropriate expertise.

A full organics composting facility at TRLS would likely be an outdoor windrow system for several reasons: (i) minimal capital investment, (ii) lower operating cost and (iii) the existing equipment, maintenance programs and weigh scale systems can be used. With windrows, the Region retains the flexibility to close, expand or upgrade the facility in the future. Moreover, SWD staff have been directed by Council to fully assess a low tech., low cost approach – the jury is still out on the efficacy of windrow composting in this area. While most higher tech. vendors are very critical of windrow composting of food waste, certification of the site and the system used is an MOE responsibility.

## 2.5 Other Composting Issues

### Private vs. Regional Operator at TRLS

Since full organics is different than leaf and yard waste composting, the Region will require some technical assistance from an experienced operator. Towards that end, a Request for Proposals will be released shortly to solicit private sector interest. Such a contract may involve setting up the site, operational assistance for a limited period of time, followed by transfer of operations to SWD staff and then interim troubleshooting.

There are two sides to the issue of private composting assistance at TRLS:

• public/private partnership to develop expertise and optimize operations.

• may fast-track facility implementation.

• potentially greater MOE and public acceptance.

sets benchmark for efficiency.

• spreads out the risk/cost of failure.

*cons* • cost impact unknown.

• need to coordinate with regular landfill activities.

• level playing field issue.

## Residential vs. Commercial Organics at TRLS

For the duration of the residential program phase-in, the Region will not process non-residential organics unless a private sector service provider is unavailable. Since multiple composting facilities will eventually be required, the Region does not want to compete with or inhibit the development of private sector operations. It is expected that private facilities will address commercial organic waste using Regional leaf and yard waste as an amendment which could be tendered out. At the end of the phase-in period, the Region will review the situation with respect to commercial organics in order to assess whether the private sector tip fees for this material are encouraging or discouraging diversion activity.

## Compost Ownership

When the Region tenders out future composting operations, three variations on compost ownership are proposed: (i) the Region keeps the finished product, (ii) the operator keeps the finished product, or (iii) some kind of product/revenue sharing arrangement may be proposed. The preferred option would depend on the bids received. Typical compost revenues from the sale of compost in Ontario are about \$10 per tonne.

### 2.6 Other Collection Issues

### **Collection Elements**

The basic features of the recommended organics collection program are as follows:

- 240 litre carts (and possibly 140 litre carts as well) special design to minimize odour
- year round bi-weekly collection
- other trucks required to help with LYW peak in the fall (weekly collection)
- preferred launch phase launch time is September-October
- implement in cost-effective areas first

## Service Areas

The general intent of the implementation plan is to bring on the most cost-effective service areas first. That is, (i) based on recent time-motion studies the most efficient collection is presently conducted in the suburban areas (i.e. the highest kilograms per collection hour); and (ii) bring on areas that are closest to composting facilities.

In rural areas, given the lower housing densities and the longer distances, curbside collection is likely more expensive. It may be more cost-effective to provide rural households with an alternative service option but further consultation with them will assist the RMOC in making this assessment. Highly dense urban areas (e.g. multi-family residences) present their own challenges especially the lack of cart storage space and/or the absence of LYW.

To reach the Regional diversion target, SWD staff are recommending that Council endorse curbside collection of organics. However, all households will still be encouraged to continue backyard composting since it is the cheapest and most environmentally friendly option. The Regional "compost doctor" support program will be continued.

#### 3.0 IMPLEMENTATION SCHEDULE

As discussed in the previous section, the most cost-effective areas would be included in the first four phases of the program. The first phase would include about 20,000 households while the second, third and fourth phases would each represent another 30-40,000 households.

The recommended date for the implementation of phase one of the organics program is Sep./Oct. 1999 following the start-up of the next solid waste collection contract in June 1999. Other than Council preference/approval, several issues influence the start date:

- co-ordination with the timing of the second collection contract tender call;
- provision of a large cart in the fall would be well-received by residents during the peak generation period for leaf and yard waste and odours would be minimized by lower seasonal temperatures;
- sufficient time is required to deliver an extensive open house, outreach program to inform and educate residents about the organics program.

Should the organics program receive approval from Council, the tender for solid waste collection which is expected to be released this April will specify the timing and proposed location of the organic program phases.

The implementation of phases 1 through 4 would be completed by the year 2002. Phases 5 and 6 involving urban and rural areas would be implemented under the third Regional collection contract pending lessons learned in the first four phases.

The number of households potentially involved in an organics collection program are estimated as follows: Phase 1 = 20,260; Phase 2 = 43,590; Phase 3 = 38,800; and Phase 4 = 37,700. Household counts for the last two phases are more difficult to make. Since the plan is to share residential organics between multiple facilities (assuming reasonable prices), every attempt will be made to eventually assign collection areas to the closest composting site.

### 4.0 TENDERING AND CONTRACTS

The planned 4-6 year phase-in of the organics collection program impacts both collection and composting operations. In both cases it would have a staggered effect as discussed in the following two sections.

## 4.1 Collection Contracts

Should the organics program receive Council approval, the next collection contract tender will identify which areas convert to organics collection and when. Two examples:

- The hauler that wins Zone X and starts LYW collection in Jun-99 will know that 20,620 households with organic carts will have to be serviced beginning in Sep-99.
- The hauler who wins Zone Y will collect LYW from Jun-99 until Sep-00; at that time, carts will be distributed to targeted households, trucks will be retrofitted and collection service provided.

When the next collection contract is tendered, it is intended that haulers bid one price for the collection of LYW and organics so that the cost of the cart tippers can be spread out over the full contract period.

## 4.2 <u>Composting Contracts</u>

With Council approval in hand, the Region will tender out Phase 1 material as soon as possible. In order to attract vendor attention and to allow competition to develop, a long capitalization period is required – that is, time for land purchase, C. of A. work and facility development. In the event of a non-competitive, high bid environment, the Region may retain the right to compost Phase 1 organics at TRLS.

The tender will be open to all firms with a private sector facility. The contract could be awarded to a firm without a Certificate of Approval from the MOE; however, the successful contractor will be responsible for composting organics collected whether its facility is ready or not. In other words, should the successful contractor not be able to compost organics at its own site when the collection program starts, it shall transfer that material to a certified processing facility at no extra cost to the Region.

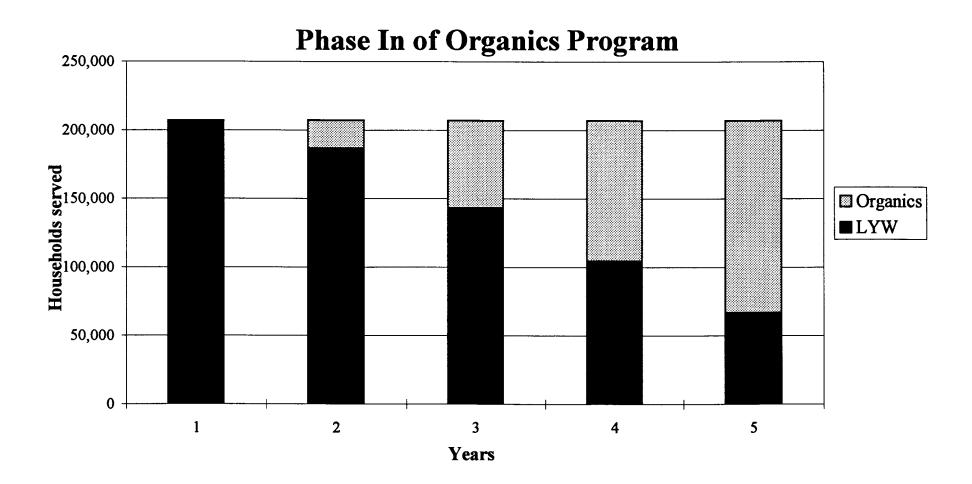
A key part of the multiple facility approach would be their geographical distribution across the Region as discussed in previous sections. With particular reference to more populated areas, facilities should be strategically located to minimize travel times. To help make this happen, the Region should control the flow of residential organic material and be able to direct it to the most logical site.

To summarize, the goal of the Region's organics management strategy is to establish multiple facilities for a sustainable composting infrastructure that encourages efficiency and maximizes Regional diversion benefits. To achieve this goal and to ensure that composting capacity is always available, the infrastructure should be comprised of both public (i.e., RMOC) and private sector players.

## RMOC Organics Diversion Strategy Private Sector Feedback

Composting vendors had a chance to review a preliminary Strategy draft and submit their comments to the Regional staff. The strategy was subsequently revised. This table summarizes vendor comments, indicates whether the text was changed or not and gives the rationale for the decision.

Issue	Vendor Comment	Strategy change	Rationale
Implementation period	no consensus; mixed views	no change	mostly a Regional issue re collection
Size of composting facilities	do not limit facility size	"limits" not actually specified but text modified in any case	it's an MOE Certificate of Approval issue
Number of facilities	why specify the number of facilities?	specific number out; benefits of multiple facilities emphasized	competition; back up capacity; transportation issue
Contract length	strong preference for 20 year contracts	no change	avoid technology and/or poor price lock ups; most systems are modular anyway
Regional composting facility	uncertainty about RMOC role/intent; widespread critique of windrow system	text clarified; low tech, low cost approach for RMOC maintained	windrow system still a viable and permitted technology
Other composting issues	process/odour control claims for in-vessel technologies; operators prefer to own compost	no change	cost competitive issue will be resolved with tender; bids will be taken if RMOC retains compost as well
Collection issues	some questions about the rationale of fall start up times	specific start date for Phase One specified	Sep-Oct preferred implementation period; coordinated with collection contract
Tendering and contract schedule	tender out Phase One and discard bids if too high	change made	Regional back up facility will be developed in parallel



## **Cost Estimates of Various Curbside Collection Alternatives**

Alternative	Contract Costs
Current Estimated Annual Cost	\$17.9
Retendered Existing Contract	\$19.3
1999 tender - weekly garbage, alternate week recycling, bi-weekly organics	\$17.4
1999 tender - weekly garbage, alternate week recycling, bi-weekly organics, one zone operated by RMOC (via managed competition)	\$16.9